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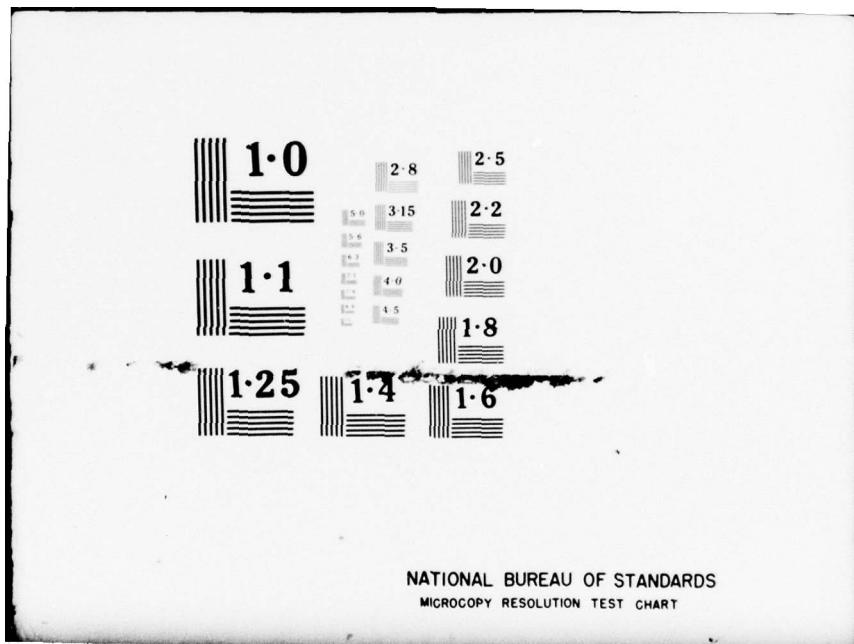
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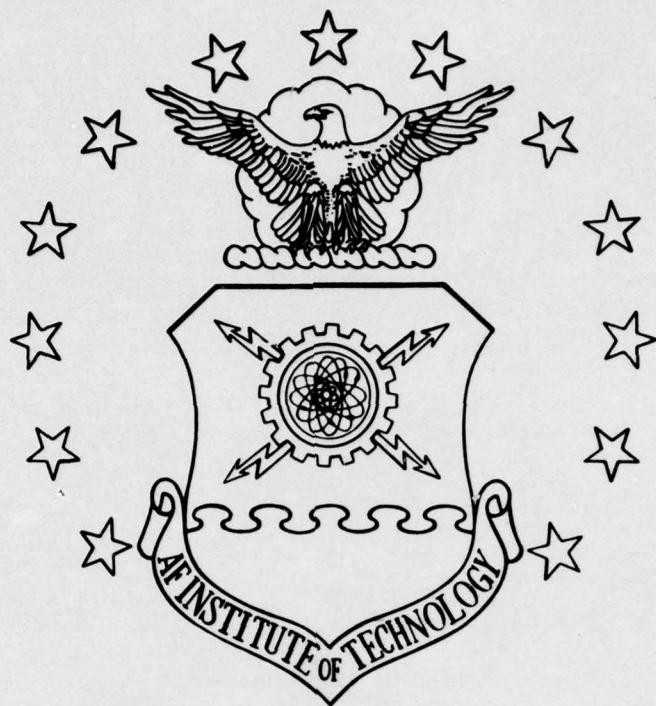
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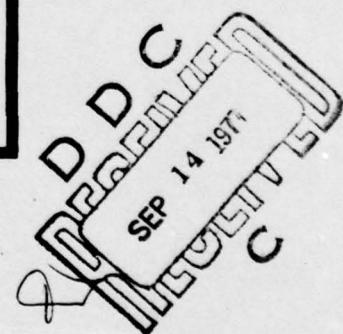
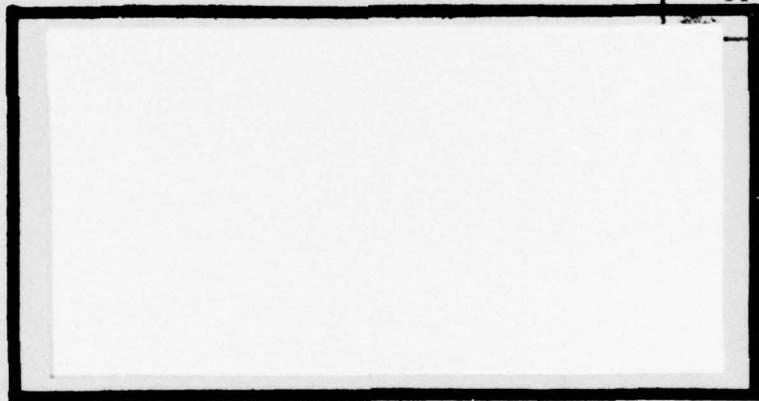


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THE DEVELOPMENT OF A GENERAL
RECOVERY PROGRAM FOR
RESPONDING TO THE ECONOMIC
IMPACTS RESULTING FROM
A BASE CLOSURE

Thomas M. Kenna, Captain, USAF
Thomas M. Riggs, Captain, USAF

LSSR 4-77A



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When a Department of Defense installation has been selected as a candidate for closure, the nearby community's perception of the impact has been found to be heightened by the uncertainty of its economic future and the worst case impact predictions presented in the Draft Environmental Impact Statement. Analyses of the recovery histories prior to 1968 indicated such impacts to be short-term. Many communities were found to be stronger economically than before the defense installation was closed. The authors set out to develop a general recovery program from the details of the successful recoveries achieved for the period 1969 to 1975. The authors examined the case histories of 21 installation closures in which the communities received assistance from the Office of Economic Adjustment. The recovery strategies employed by these 21 communities were similar regardless of the communities' size, location, or economic base. The strategies were all based on three areas; re-use of surplus property to develop the economic sector, human resources improvement, and re-use of installation facilities to correct facility deficiencies in the community. The authors synthesized these strategies into a Community Framework and an Air Force Planners' Framework intended to help mitigate the community's perception of economic recovery.

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THE DEVELOPMENT OF A GENERAL RECOVERY
PROGRAM FOR RESPONDING TO THE
ECONOMIC IMPACTS RESULTING FROM
A BASE CLOSURE

A Thesis

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology
Air University

In Partial Fulfillment of the Requirements for the
Degree of Master of Science in Facilities Management

By

Thomas M. Kenna, BSME
Captain, USAF

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June 1977

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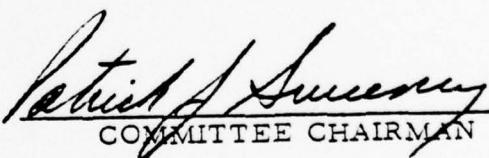
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CHAPTER I

INTRODUCTION

Statement of the Problem

Analysis of events that have occurred after a base closure or realignment has been announced, indicates that in nearly every instance the initial inclination of the local community has been to appeal for reversal of the DOD decision to close or significantly curtail activities at the installation selected. The struggle to maintain the status quo is carried out in lieu of developing and implementing a plan for recovery and redirection of the economy. A very small percentage of those communities appealing the decision are successful in obtaining the reversal so vigorously sought. Nevertheless, this adverse public reaction to the announced DOD action results in both lost time and money to the Air Force since additional operation and maintenance expense is incurred in maintaining an installation in excess of defense requirements. Furthermore, the community has also been found to be similarly affected since the time spent in protesting a closure or realignment action is time lost toward implementing recovery plans and attracting new tax-paying, job-producing industry to replace the economic loss of the base.

As a result of this impasse, the Air Force Civil Engineering Center has identified a need for development of a set of general economic recovery programs to be utilized by Air Force planners during the environmental impact analysis process. The intent of this set of programs would be to assist in mitigating the severity of the adverse impact that is perceived by a community affected by a base closure or realignment when the Draft Environmental Impact Statement (DEIS) is released. Whenever a particular military installation is selected for study in a closure or realignment proposal, programs applicable to the economic character of the community would be drawn from the general economic recovery set as the initial presentation to the community. This select set of programs could then be released simultaneously with the DEIS to demonstrate to the community that there are practical alternatives to the retention of the installation that will preserve or enhance the quality of life in the community. Thus, the problem for research is that no general set of economic recovery programs presently exists for use in providing possible solutions that would help mitigate the unavoidable impacts perceived by communities affected by a base closure or realignment.

Background

Base and Community Interrelationships. An Air Force base and the local community become very interrelated over the years of the

base's existence. This interrelationship is the result of many factors that can best be described by the manner in which support requirements are generated on the civilian community by the military base. As a military installation grows and becomes established in the local community, the community must often expand public facilities (e.g., parks, utilities, fire protection, and police protection) in order to adequately serve the increased population directly employed by the base as well as the concomitant increase in the population employed by the service industries that support the base and its employees. This population growth necessitates expansion of the school system to accommodate the associated increase in enrollment of military and civilian dependents. The community becomes accustomed to the base payroll, a large portion of which is spent in the local area, as well as the social and cultural contribution to the community of the personnel attached to the base. This interdependence becomes so comfortable that few communities make ". . . any effort to attract new job-producing industries to offset the possible loss of the military base [12:5]." As this relationship between the military and civilian community develops into one of greater reliance on the base by the local community, the leaders of the community become very sensitive to proposed realignments that might affect "their" base. Prospects of disappearing jobs, vacant houses and apartments, local businessmen suffering under the loss of a potentially significant

portion of the buying public, and the loss of federal impact aid to schools move local officials to react to closure or significant realignment announcements in a negative way (12:5).

The Need to Reduce Inefficient Bases. In spite of the beneficial aspects of this comfortable relationship between a military installation and the local community and notwithstanding the general desire of the local community to retain the base, changes in the military force structure can become necessary. New defense requirements and improved technology can make a base inefficient for required operations or surplus to long term defense needs. Strategic decisions concerning national defense must be made in the best interests of the entire nation. Retention of bases that have outlived their usefulness only causes unnecessary expenditures of funds. The need to reduce these inefficient operations is summed by Vernon Hagen:

Failure to eliminate obsolete facilities dilutes the efficiency and effectiveness of the nation's military forces. Like it or not, there are limited resources available to satisfy the unlimited needs of the total society. Therefore, in peace or war, only limited resources are available for defense. Every dollar or any other resource which is committed to one activity means less resources available for some other activity and thus a potential loss in effectiveness [7:3].

Furthermore, realignment actions are becoming more necessary to maintain an installation posture consistent with reduced force levels and training requirements as the number of men and women in uniform decrease.

Since 1968, approximately 1,400 installations have been closed (26:4). Although many of the bases were small, others employed a significant percentage of the local work force. A reduction in employment resulted in a definite impact to the community well being. A total of over 2,000 installation closures and realignment actions have been accomplished since 1961 when President John F. Kennedy instructed the Secretary of Defense ". . . to reappraise our entire Defense strategy . . . the efficiency and economy of our organization--and [consider] the elimination of obsolete bases and installations [10:6]." At the time of the President's instructions, the United States had acquired a considerable array of military facilities. Despite the fact that many installations were recognized as outmoded ". . . internal U.S. political pressures were usually directed toward retaining these facilities long beyond their military usefulness [12:5]." The overall need for an efficient military to provide necessary national defense posture at minimum cost was the primary consideration in the aforementioned realignment decisions. The Department of Defense (DOD) re-emphasized that the Pentagon was responsible for the security of the nation and ". . . not really for the creation of a level of demand adequate to keep the national economy healthy and growing [12:10]." As a consequence of these decisions and actions, many small communities were forced to endure a period of recovery from the loss of a military installation in order

that national defense requirements might be met in an efficient, minimum cost manner.

Community Reaction to Base Closure Announcements. Experience has shown that once a closure has been announced for a particular base, the reaction from the surrounding community tends to follow five very definite stages (5:41):

1. Disbelief
2. Efforts to rescind the decision
3. Open panic
4. Resignation to the inevitable
5. Decision that the closure was probably, in balance, advantageous for the economy.

The first two stages culminate in appeals to the Secretary of Defense and Congress, generally to no avail since few closure decisions have ever been reversed (5:39). After confirmation that a nearby installation will definitely close despite the appeals, the community begins to behave in a state of panic. However, available information indicates that in most cases the more pragmatic community leaders prevail and guide the community into the fourth stage relatively quickly. Viewing the scheduled closure action with resignation to the inevitable, the community begins to analyze the action without the initial, emotional response and begins ". . . to see the closure as a good opportunity for the city to obtain a non-military economic foundation [5:39]." The

resultant implementation of plans and programs to compensate for the loss of the military mission from the community environment then generally leads to full recovery.

Successful recovery efforts lead to the stage five reaction. It becomes readily apparent that the closure action is not so serious as to be impossible to overcome. Indeed, one principal study of base closures from the 1964 announcement concluded that the affected communities ". . . incurred much less severe changes in economic activity than those which appeared to be anticipated by the publicity and concern generated [5:4]." Furthermore, the latest Office of Economic Adjustment article reported that at 38 locations receiving major economic assistance prior to 1975, 93,000 jobs have been gained against the 89,000 lost (52:19).

Assistance to the Local Community. Since 1961, DOD assistance to communities affected by base closures and realignments has been accomplished through the Office of Economic Adjustment (OEA). The OEA role is one of representing the Federal Government in coordinating the resources of numerous other agencies toward assisting the affected community (12:ix). The concept behind the assistance is that economic recovery is the responsibility of the local community; however, the DOD can be instrumental in aiding the local community to attain strong local recovery through four primary actions. These main categories of action are best described as (52:15-19):

1. Mobilization of Federal financial resources to provide available grants, loans, and loan guarantees to impacted areas.
2. Development of a strategy of action for the community as a possible avenue to recovery.
3. Priority placement of DOD employees to insure that career employees have an opportunity to relocate to another DOD job, thus reducing the unemployment burden on the local economy.
4. Familiarization of affected communities with General Services Administration (GSA) procedures that permit the local community to acquire excess facilities and land at fair market value without entering into competitive bidding with other parties.

On March 4, 1970 the Inter-Agency Economic Adjustment Committee (EAC) was formed with the Secretary of Defense as chairman (18:5). The OEA serves as the coordinating arm of the EAC and as such the role of OEA has not changed, but rather the emphasis is on a more formal relationship with other Federal Agencies (these agencies are now members of EAC) than before the creation of EAC (18:1). The OEA responds to local impact areas only upon invitation of the impacted community (18:8). This reinforces DOD belief that leadership in recovery is the responsibility of the local community with the DOD providing support in the form of funding and technical expertise. Another important fact concerning the local community reaction is best described by Mr. Lynch.

Efforts to utilize political pressure to reverse the base closure decisions have been totally unsuccessful during the 1961-1968 period. Moreover, a prolonged political battle eliminates any possibility of early recovery planning. Once the closure decision is affirmed, the affected community would be well advised to center its attention on the demanding conversion task [12:xii].

The National Environmental Policy Act. The National Environmental Policy Act (NEPA) of 1969 ushered a new variable into DOD planning procedures concerning projects that affect the environment. As stated in Section 2 of the Act,

The purposes of this Act are: To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the nation; and to establish a Council on Environmental Quality [2:23].

It appears that initial Air Force response to NEPA was the consideration of environmental impacts of the physical nature, i.e., air, water and noise pollution. The initial Air Force Regulation 19-2, "Environmental Assessments and Statements," 20 January 1972, approached environmental impacts only from the physical aspect with no mention of assessments concerning base closures (22:7-8). Air Force procedures to respond to environmental impacts resulting from Air Force projects and programs have been developed. As one example, the Air Installation Compatible Use Zone (AICUZ) concept has been highly innovative.

The Air Installation Compatible Use Zone Concept. The Air Force already has considerable experience in proposing plans and programs to community leaders in the implementation of the AICUZ program. Primarily directed towards the control of land encroachment around

Air Force bases, the main thrust is to act as a land use planner for the local community by providing suggested uses which are compatible with a base's mission (55:6). This program is an example of the Air Force responding to the needs of communities located near Air Force installations in recognition of the requirement established by NEPA and, significantly, in response to the Air Force's need to perform its mission unencumbered by the consequences of community encroachment on airfield traffic patterns.

Experience has shown that when unguarded development impinges upon a facility's accident potential areas and/or high noise zones, the impacted groups soon seek relief. This can range from the imposition of "quiet hours" to the complete closure of a facility [21:I-1].

The Air Force has therefore, found it to be in its best interest to perform some planning functions which would normally be considered the exclusive purview of the civilian community in order to facilitate efficient and expeditious accomplishment of the overall Air Force mission.

Proposed Closure of Richards Gebaur AFB. The Air Force interpretation that NEPA was solely concerned with physical impacts was successfully challenged in April of 1975. At this time the courts restrained the Air Force from taking further action to realign the mission at Richards Gebaur Air Force Base, Missouri (RGAFB) until a detailed Environmental Impact Statement (EIS) was prepared (14:3). The contention of the suit was that an EIS had not been

prepared as a decision making input (13:2, 52). The primary factor in this case was that the initial assessment prepared by the Air Force determined that the proposed moves were not major federal actions and would not significantly affect the local community. As it turned out in the hearing and in subsequent research by the Air Force, there would be significant impact on housing and other socio-economic factors in the RGAFB community (14:4).

The RGAFB case has caused the Air Force to conclude that complete compliance with the spirit of NEPA requires the consideration of socio-economic factors, as a result of an installation closure, to be a possible environmental impact. As such, the Air Force has determined that the guidelines of NEPA should be followed in the decision process concerning base closure or realignment studies in the same manner as the guidelines are used in projects that concern physical impacts on the environment.

The Air Force Approach to NEPA. The current Air Force approach to meeting the requirements of NEPA is outlined in the Air Force Handbook for Environmental Impact Analysis. The Environmental Impact Analysis Process (EIAP) is conducted to quantify ". . . the environmental effects of a proposed action and alternatives . . . [4:9]." The EIAP must answer the following questions (4:9):

1. Will the proposed action have a significant effect on the quality of the human environment?

2. Will the project involve or is it likely to create public controversy?

The Air Force considers the EIAP as a process used to discover and quantify potentially significant impacts, the whole purpose being ". . . to avoid or minimize adverse impact--not just justify it [15:31]." The output will be one of two reports, a Negative Determination (ND) or a Candidate Environmental Impact Statement (CEIS). In the case of the ND, the EIAP terminates and the project continues (4:9). However, if it is determined that an impact statement is required, a CEIS must be prepared (4:9). The CEIS then proceeds through Air Force channels for a final decision of impact. If approved the CEIS becomes a Draft Environmental Impact Statement (DEIS) and is released for public review and hearing (4:7-9). All comments relative to the DEIS must be incorporated in a Final Environmental Impact Statement (FEIS) which then goes through Air Force channels and completes the planning process (4:10).

It is important to note that the law does not ". . . stipulate that when an assessment is unfavorable, a project cannot be pursued [8:54]." However, the intent of the act is that the impact be considered, alternative approaches outlined and the affected community be allowed to comment on the project. In other words, NEPA establishes a well defined decision process that insures the inclusion of all inputs germane to the problem before a final decision is made.

In order to gather the information necessary to develop a DEIS concerning an installation being considered for closure or realignment, the Air Force has designed the Tab A-1 of the base Comprehensive Plan in such a way that the information required for the DEIS is available in the Tab A-1 (4:11). The use of the Tab A-1 or Environmental Narrative allows the Air Force planner to develop the required impact predictions concerning the degree of impact the proposed action will have on the local community.

It should be noted that since the EIAP is a decision making process, no decision concerning the proposed action can be made until after the FEIS has been filed. For this reason, it has been deemed inappropriate for OEA to provide recovery planning assistance to the local community during the decision process. The implication of such assistance would be that the OEA involvement is indicative that a decision to close a particular installation had in fact preceded the official decision process (17). As a result, OEA does not lend assistance until the formal decision process is complete, and does so then only if requested by the community leadership. Therefore, during the entire decision process, the community is generally faced with a worst-case prediction of impacts as stated in the DEIS with little impact-mitigating guidance available to soften the blow. The time between the release of the DEIS and announcement of the final decision generally ranges from 12 to 15 months (17). Thus,

there is currently a large period of time where a base/community under study is in limbo. This time could be better spent in examining various courses of action in the event installation closure becomes a reality.

Early Efforts to Aid Planners in Predicting the Impact of Installation Closure. Initial analyses of the impact of base closures on the surrounding community was conducted by historical case studies. These studies by Lynch and Daicoff focused on determining the community reaction as well as the effectiveness of Government assistance provided (5; 12). Two developments from these studies are of interest to this research effort. A composite economic recovery approach based on studies of bases closed during the period 1961 to 1968 was developed by Mr. Lynch (12:xi-xiii). In trying to determine the severity of a closure or realignment on the local community, Mr. Daicoff related the actual reduction in the DOD work force to the total employment of the community. Mr. Daicoff judged a job loss of over three percent of the total population to be severe, and a loss of one percent to be moderate (5:12).

In trying to assess potential impact of installation closures, the Construction Engineering Research Laboratory (CERL) has conducted work culminating in computer-based data systems that provide environmental information to be used by the preparer of impact assessments in predicting the impact of the proposed project (9:7).

Of particular interest to this research effort is the Economic Impact Forecast System (EIFS). The EIFS addresses socio-economic changes caused by proposed projects, and points out severe problems early in the decision making process (1:7).

The Effect of Impact Prediction in the DEIS. The impact of NEPA upon the base closure or realignment process has been twofold. First, the law has directed that proponents of the project must attempt to predict the impacts that would result from the proposed action. Second, the affected community is allowed through public forum to provide inputs to the decision making process. The community may take exception with the DEIS and any issues that arise at this stage of the process must be considered in the Final Environmental Impact Statement (FEIS).

In regard to meeting the responsibility of impact prediction, several methods are being utilized by the Air Force. The Air Force Comprehensive Plan, Tab A-1 contains information necessary for predicting impacts on a local community. Additionally, the CERL developed Economic Impact Forecast System (EIFS) predicts impacts for an identified community, given the number of personnel affected. One problem beginning to surface concerns the accuracy of these predictions. The predictions presently being developed indicate a high degree of impact severity that has not been substantiated by experience. This situation is most likely the result of Air Force planners'

desire to be completely thorough in their impact identification process. Unfortunately, these exaggerated predictions have the effect of strengthening the community's resolve to prevent the loss of a local military installation (11).

An analysis of the history of installation closures and realignments indicates that the local community's initial reaction to a reduction has been one of general unacceptance. Communities have sought to maintain the status quo. The recent developments previously noted have aggravated this situation and the prospects of lengthened delays in the closure/realignment process have been the result. The severe impact predictions currently being furnished in Federal DEISs have the net effect of further intimidating communities that are already fearful for their economic well-being in the face of a proposed closure or reduction. This increased intimidation can provide the necessary motivation within the community leadership to take advantage of the NEPA-mandated opportunity to comment on the DEIS and use this process to postpone the actual reduction action as long as possible. However, once the community's comments have been answered and the FEIS filed, the proposed closure or reduction can proceed. The FEIS is not an approval/disapproval document, only one of consideration. The community, then, has spent a great deal of time and energy in a futile effort to retain the installation; energy which could well have been spent in plotting a course of economic

recovery. With the decision to proceed with the installation closure or realignment, OEA steps in (if requested) and lends its expertise in assisting the community in the formulation of recovery plans. The principal observation to be made here is that the closure or realignment process is well downstream before a comprehensive recovery program is even formulated, much less implemented. Time spent opposing the reduction is lost to the recovery effort.

Justification

The effect of the predicted impacts contained in the DEIS, then, is to polarize members of the community against the proposed action rather than to encourage them to consider economic development alternatives that might be appropriate. This circumstance is not surprising because the DEIS currently provides only a small amount of impact-mitigating information. The DEIS does not suggest economic development ideas that have been successful in other closures, and as a result members of the community have little to direct their attention to except the degree of predicted impact. If some possible recovery strategies appropriate to the community in question could be provided at the same time that the DEIS is released, the community may be encouraged to be more pragmatic and begin recovery planning before the lengthy decision process is complete.

There exists a need for an established framework that will enable Air Force Planners developing the DEIS to not only predict

the impact of base closure but also to provide possible economic recovery scenarios that are appropriate, given the local community's situation. This inclusion of proposed solutions to unavoidable impacts has the same net purpose as other Air Force/community planning programs such as AICUZ: to assist the local communities in coping with the problems posed by the defense mission in such a way that the interests of both the Air Force and the civilian community can be served. These possible recovery scenarios can be developed out of past closure experiences. Synthesizing the lessons of the past into usable classes will allow the Air Force planner familiar with the local situation to extract those ideas successful in similar situations for consideration by local community leaders.

Consideration of proposed solutions early in the ELAP should provide the impetus to the community to reject the impulse to fight a proposed closure and enable it to begin preparing a recovery plan with little or no delay. The Air Force benefit derived from using this proposed-solution framework would stem from the time savings realized from increased acceptance of a closure decision by the members of the local community. Furthermore, the Air Force would experience greater fulfillment of its obligation to minimize the impacts of the closure action felt by the surrounding civilian community. Should the decision be made to keep the nearby military installation open, their head start at economic development would not have

been wasted. Their plan could serve as a basis for further diversification of their local economy, so as to become less dependent upon the presence of the military.

Objectives

The objectives of the proposed research are: (1) to develop a set of general economic recovery programs that can be used to provide possible solutions that aid in mitigating the economic impacts of an installation closure or realignment as perceived by the affected communities; and (2) to determine whether separate frameworks need be designed to deal with base closures or reductions of varying impact where impact is expressed as a function of civilian jobs lost in the local area as a result of installation closure or realignment.

Research Questions

The answers to the following research questions will provide the means to fulfill the research objectives:

1. What factors should be considered in the development of a set of general economic recovery programs that can be used to provide possible solutions that aid in mitigating the economic impacts of an installation closure or realignment as perceived by the affected communities?

2. Is there a difference in viable solutions to base closures or realignments based on the degree of impact when expressed as a function of civilian jobs lost in the community?

CHAPTER II

METHODOLOGY

Scope

This research effort attempted to identify those factors considered suitable for inclusion in a framework designed to assist Air Force planners in proposing initial solutions to the unavoidable impacts facing a community located near an Air Force installation designated for closure or realignment. The population for this study consisted of all communities affected by an Air Force base closure or realignment action between the years 1969 and 1975 (inclusive). From within this population, the sample studied consisted of all communities that, (1) experienced a reduction in jobs of one percent or more of the total Standard Metropolitan Statistical Area (SMSA) work force, as defined by the Bureau of the Census (20:849) and, (2) received assistance from the Office of Economic Adjustment (OEA) in their recovery efforts. In those cases where there was no applicable SMSA, the work force of the county that the installation was located within was used.

The sample of affected communities analyzed was further divided into two classes. A job reduction due to a base closure of

between one and up to three percent of the total work force was termed moderate and a reduction of three percent or greater was considered severe. The class division was based on Daicoff's methodology (5:12), which set the impact percentage purposely low so as to err on the conservative side when determining impact.

The population was limited to the specific time frame outlined above for two reasons. The first reason is that comprehensive case studies have been conducted on many of the installations closed prior to 1968 (7; 12). The work of Lynch during this early time frame provides the initial basis for the method of analysis to be conducted by this research effort (12:xi-xiii). The second reason is that those closures occurring prior to 1969 represents a time during which the successful recovery of many of the affected communities could possibly be attributed to the prosperous state of the national economy (5:4). In order to provide an accurate framework for present day use, the research will be conducted for a period of time much more representative of the state of the economy that the nation is now experiencing.

The initial work of Daicoff measured severity of impact as a percentage of the total jobs reduced on the installation compared to the total community population (5:12). The OEA measures the success of its efforts in a local community recovery by determining the number of replacement jobs established after the impact

occurred. To make this determination, the total number of civilian jobs eliminated as a result of the closure impact is compared to the number of replacement jobs created by the community's recovery program (53:19-20).

Clearly, the OEA approach to economic impact attenuation has reduction of the local unemployment rate as one of its basic tenets. Consequently, personnel actions which do not contribute to the local unemployment rate are not seen as having an adverse impact. For example, since the majority of the military personnel assigned to an affected installation are transferred to other locations, they do not join the ranks of the unemployed and hence do not constitute a direct, adverse impact. It has also been found that many of the military personnel's dependents vacate jobs in the community to move with their sponsors (5:50) to create employment opportunities for others. Department of Defense civilian employees affected by the installation closure have the opportunity to move to civil service jobs elsewhere rather than join the unemployment roles and many do move. Since 1964, 62% of all DOD civilian employees so affected by defense realignments have been relocated through the Priority Placement Program (53:15-16).

Thus the economic impact on the community results largely from the DOD civilians who elect to remain and the loss of those jobs in the community that were principally supported by business from

the military installation. This latter impact, generally referred to as the multiplier influence, has been found to have considerably different effects on the community economy for military and civilian job losses. The OEA has determined that the military multiplier for job reductions is 0.66 while the multiplier for DOD civilian job losses has a mean value of 1.53 (18:39). That is, a reduction of 100 military positions at an installation has the resultant impact of 66 job losses on the local economy. Thus civilian reductions at an installation affect the community employment almost two and a half times as much as the military reductions. This domination of the employment impact by the DOD civilian job loss provides the rationale for the OEA's measure of a successful recovery.

However, the impact of a large military personnel reduction accompanied by a small civilian personnel reduction is considered by the researchers to be significant though not as pervasive. This effect is demonstrated by several communities that experienced insignificant civilian impact (i. e. less than 1% of the work force) coupled with large military personnel reductions and were impacted to the extent that they warranted full OEA assistance. The researchers determined that cases fitting this description constitute instances of significant impact of value to this research and included them in the study population as members of the moderate reduction classification.

Data Collection

The principal data source for this research were the case files of affected communities for which OEA has provided assistance. These files are located in the Washington, D.C. office of OEA. Obtaining information necessary to answer the research questions required review of the recovery histories of the individual installations meeting the requirements of the research population. A personal visit by the researchers to the offices of OEA was conducted to examine the case histories as documented by OEA.

Secondary sources of information for this research consisted of personal interviews with OEA personnel and the review of other related literature such as periodicals, news releases, or government documents that were, generally available to the public and served to provide further relevant information concerning the affected communities under study. The OEA personnel selected for the interviews were chosen only if they were directly involved with assisting the members of an affected community in plotting a course of recovery actions at some time during the period 1969 to 1975, inclusive.

In order to determine base closure/realignment actions to be included in this research effort, a listing of Air Force installations affected by closure or realignment actions was compiled. The major announcements during the time period 1969 to 1975 occurred

on 24 April 1969 (30), 29 October 1969 (3; 28), 6 March 1970 (29), 13 March 1971 (6), 17 April 1973 (31), and 22 November 1974 (32). Referring to this comprehensive list of closures, the researchers reviewed the OEA project file list to select those affected communities that would be included in the research effort. Many communities affected by an installation closure, found in the OEA files were of a technical assistance (i.e., advisory) nature only and were not considered in the case studies. For the remaining communities, the percentage of the total labor force losing jobs as a direct result of the installation closure or realignment was determined. If the job loss percentage was found to be between one and three percent, the impact was labeled moderate. A job loss percentage greater than three percent was considered severe. In several cases, the percentage of civilian reductions to total labor force was less than one percent, yet there was a very large military reduction. In those cases where the total military and civilian reduction was greater than two percent of the labor force, the resultant impact was labeled moderate. Appendix A lists all Air Force installations affected by the base closure/realignment announcements for the period 1969 through 1975.

Analysis of Data

Each case study meeting the specified criteria was subjectively analyzed in order to identify those factors in each case

study that should be included in a framework that is intended to help mitigate the perception of adverse impacts in communities faced with closure or realignment of a nearby Air Force installation. The analysis used a common reference point for extracting pertinent information from data sources in the form of a set of standard questions to be asked concerning each affected case under study. The questions have as a basis the framework of suggested methods for community recovery developed by Mr. John Lynch in his study of closures and reductions that occurred during the period of 1961 through 1967 (12:xi-xiii, 17-18). The instrument used in the evaluation of the cases selected for this research is contained in Appendix B. Data extracted from the files answering the listed questions was accumulated in summary form by case and is contained in Appendix C.

After tabulation was accomplished, the researchers made a subjective determination as to whether a distinction between those techniques used in recovery actions in cases of moderate impact, as opposed to those having severe impact, was warranted. The result of this determination was used to decide if a distinction between moderate and severe impact is appropriate, and if so, whether more than one framework is required for the differentiated impacts.

In order for a factor identified in the case studies to be included in a proposed solution framework it must have met, in the opinion of the researchers, the following criteria:

1. The factor is general in nature to the extent that its effect or benefit could be applied in locations other than the one it is found to occur.

2. The factor is of utility in a planning situation such that the Air Force personnel tasked with providing a set of proposed solutions for community use will have a framework of sufficient substance so that a reasonably concrete set of proposals can be made.

General reference to positive attitude and community confidence, for example, were excluded from the framework. Even though these factors are important in a recovery effort, they are viewed, in the opinion of the researchers, more as a means to an end than a proposed solution.

Assumptions

1. Sufficient information for each case was available in the OEA files to enable the researchers to discern an accurate appraisal of those events that were dominant factors in a particular community's recovery effort.

2. Solution methods found to occur in case files of OEA constitute a representative sample of those factors which should be included in the framework.

3. Any area affected significantly by a job reduction due to closure or realignment of a nearby base did request assistance from OEA.

4. Interviews of OEA personnel were accurate representations of fact concerning the recovery actions under study and as such could be included as a data source for this research.

Limitations

1. A complete census of all information pertaining to a significant base closure or realignment case was not accomplished due to externally imposed time and manpower constraints. Therefore, this research will limit its data collection to the case files located in the Office of Economic Adjustment in Washington, D. C. and when appropriate to data available from the General Services Administration.

2. Since the OEA does not assist affected areas unless first requested by the local community, use of OEA case files will have the effect of limiting the sample to only those affected communities that have requested aid from OEA.

3. Factors which were driving forces in the recovery efforts of communities early in the recovery efforts of communities early in the research period (i. e., 1968 or 1969) may have little practical application in a proposed framework for considering future recovery actions.

4. The final limitation pertains to the availability of sufficient data in the early stages of the research period. Potentially relevant information may have been lost or destroyed, and

individuals that may have had first-hand knowledge of the events surrounding a given community's recovery effort were no longer available for interview.

CHAPTER III

PRESENTATION OF THE RESULTS

Introduction

Review of the cases selected for analysis appears to support the contention that a carefully thought out recovery plan can replace the jobs lost by a community due to an installation closure. Indeed, of the 21 cases analyzed, a total of 17,080 replacement jobs were obtained for the 7,392 civilian jobs lost in the corresponding defense reductions. The analysis to follow will review the data from each question obtained through application of the standard questionnaire (see Appendix B) and attempt to identify characteristic recovery actions that communities so affected in the future could utilize in their recovery effort.

Presentation of the Data

Question One. Those reductions meeting the criteria of having experienced a moderate impact as defined in this research (i.e. experienced a reduction of civilian jobs totaling from one to three percent of the local work force) are listed in Table I. Those reductions where a severe impact occurred (i.e. a reduction of civilian

Table I
Communities Sustaining a Moderate Impact

Installation Name	Affected Community	Jobs Lost	Military	Civilian	Area Work Force	Percentage of Area Work Force
Thomasville AFS	Thomasville, Alabama	110	18	5575	2.3 ¹	
Oxnard AFB	Camarillo, California	1284	293	55840	2.8 ¹	
Hamilton AFB ²	Novato, California	1090	1103	39407	2.8	
McCoy AFB	Orlando, Florida	2930	472	156146	2.2 ¹	
Bakalar AFB	Columbus, Indiana	23	318	24981	1.3	
Forbes AFB	Topkea, Kansas	1241	83	52327	2.5 ¹	
Westover AFB	Chicopee/Ludlow, Massachusetts	4014	492	179190	2.5 ¹	
Wadena AFS	Wadena, Minnesota	115	15	2301	5.6 ¹	
Lewistown AFS	Lewistown, Montana	108	27	1904	7.1	
Stewart AFB	Newburgh, New York	2464	1011	48914	2.1	
Adair AFS	Corvallis, Oregon	749	180	9017	2.0	
Burns AFS	Burns, Oregon	104	23	1410	1.6	
Sweetwater AFS	Sweetwater, Texas	136	14	1799	8.3 ¹	

Notes

1. This figure is the military and civilian percentage of the area work force.
2. Jobs lost figure combines the 1973 and 1974 announcements.

jobs that was greater than three percent are contained in Table

II.

In cases where the total military and civilian personnel reduction was greater than or equal to two percent of the local work force, the researchers determined that a sufficient impact had occurred on the nearby communities for their recovery programs to be of value to this research. Such cases are therefore included in the moderate impact classification even though they may not meet the one to three percent civilian job reduction criterion.

Question Two. The affected communities were classified within six different categories as shown by Table III. Some general observations apply when considering the community characteristics within each category. All eight communities classified as agriculture/ranching planned to utilize the announced closure as a chance to attract industry (at least light manufacturing) to their area. Community leaders viewed the potential availability of the military installation's land and facilities as affording an excellent opportunity to attract the new commercial or industrial enterprises necessary to diversify the local economy.

Those communities with light manufacturing firms already in existence saw the chance to attract additional industry through the use of the airfield and excess facilities. This approach was evident in cases where the community was classified strictly as light

Table II
Communities Sustaining a Severe Impact

Installation Name	Affected Community	Jobs Lost	Military Civilian	Area Work Force	Percentage of Area Work Force
Wildwood AFS	Kenai, Alaska	374	65	1367	4.8
Kodiak Tracking Station	Kodiak Island, Alaska	2	121	2833	4.3
Clinton County AFB	Wilmington, Ohio	50	550	6373	8.6
Clinton-Sherman AFB	Burns Flat, Oklahoma	2713	391	4681	8.4
3 Raney AFB	Aguadilla, Puerto Rico	1355	623	4199	14.8
Sewart AFB	Smyrna, Tennessee	6033	470	12831	3.6
Perrin AFB	Sherman/Dennis on, Texas	1450	600	19304	3.1
Laredo AFB	Laredo, Texas	1274	523	14893	3.5

Table III
Community Characteristics

Community	Ranching Agriculture	Light Manufacture	Transportation Hub	Tourism	Abundant Education	Rural
Kenai, Alaska						x
Kodiak Island, Alaska						x
Thomasville, Alabama						x
Camarillo, California	x					
Novato, California						
Orlando, Florida		x				
Columbus, Indiana	x		x			x
Topeka, Kansas		x	x		x	x
Chicopee/Ludlow, 34 Massachusetts						
Wadena, Minnesota					x	x
Lewistown, Montana	x			Trading Center		
Newburgh, New York		x				
Wilmington, Ohio	x	x				
Burns Flat, Oklahoma	x		x			x
Corvallis, Oregon						x
Burns, Oregon					x	x
Aguadilla, Puerto Rico						
Smyrna, Tennessee	x					
Sweetwater, Texas					x	x
Sherman/Dennison, Texas	x			x		
Laredo, Texas	x	x			x	

manufacturing as well as in those communities characterized as having economic bases in light manufacturing and agriculture. Those communities classified as a transportation hub also attempted to attract industry through airfield use or developed the airfield as a community airport as a means of developing or improving the area recreation and tourism industries. The three communities classified as having abundant education facilities believed that the high quality of human resources provided by these educational facilities was an asset in attracting industry to their communities.

Those communities classified as rural placed little emphasis on attracting industry to utilize the excess facilities on the Air Force installation. Of the seven communities so classified, six planned some type of educational use, with the primary motive being their desire to eliminate area social deficits and thereby help attract prospective industry. It should also be noted that only one of the seven excess facilities (Bakalar AFB) had an airfield. The nearby community of Columbus fully committed their recovery effort to convert this airfield to a municipal airport. Some of the remaining communities expressed little desire in utilization of the surplus facilities until some time after the closure announcement, preferring to pin their hopes on re-use of the installation by another Federal agency. This approach lengthened the period of economic impact experienced by the community in excess of what it need have been.

The two principal obstacles that beset the communities in successful re-use of the excess bases came in the form of local disinterest (Lewistown, Montana and Burns, Oregon) as well as conflicting proposals for re-use of the facilities (Camarillo and Novato, California) to GSA. Conflicting proposals are detrimental to all involved. During the negotiations, the facilities deteriorate as they lie idly by. Final determination in the Camarillo case took six years and negotiations with GSA are still underway in Novato, although the city of Novato has adopted the role of observer to let the Marin county leadership be the sole negotiator with GSA.

Another obstacle arose at Chicopee/Ludlow, Massachusetts due to DOD requirements to retain the airfield. In every case studied in this research which had an airfield available for re-use, the airfield and associated flight line shops and facilities were a major attraction for industry. In the case of Westover, the available education assets (another previously mentioned factor) still provide a skilled labor force that is attractive to desirable industry.

The problem areas that then become the principal delaying factors in productive re-use of the property are related to planning new uses that do not conflict with the remaining military units, establishing metes and bounds of the land parcels to each grantee, and equitably dividing the costs of segregating utility system operations and maintenance for the parcelled property.

The most significant distinction among the ways community assets were exploited in the recovery effort was not wholly related to the type of economy extant to the area at the time of the defense reduction. The existing economic structure did affect detailed aspects of the closure (e.g. what specific class of industry would find an area attractive), but the principal difference in overall recovery strategy had its basis in whether or not an airfield was available for re-use, not the intrinsic assets originally considered important by the researchers. If there was an airfield available, it appears that the provisions of the Federal Surplus Property Act made it easier for the community to plan for revenue-generating re-use of the surplus property provided the airfield was converted to public aviation use. In such cases the surplus property can be conveyed to the community under a public benefit discount. Where no airfield is available, however, such conveyance discounts are available only for public recreational, educational, or health-care uses. Other uses of the property would require the community to obtain the property from GSA at the fair market value, a fact which would virtually preclude small communities from independent re-use of the property, or require that the take-over entity have bonding authority in order to raise the required revenue. These considerations strongly compel communities to take advantage of the public-benefit provisions of Federal law. A further differentiating aspect of the

re-use plan in those closures where no airfield is available is that military installations which did not have flying missions did not have large industrial space available. Facilities such as aircraft maintenance hangars and jet engine shops were not needed to support the military mission and consequently the "instant space" useful for attracting manufacturing industry was lacking.

Question Three. Review of the cases reveals that the state role ranged from absolutely no involvement to almost complete direction, as in case of the Commonwealth of Puerto Rico. Enabling legislation of some nature was required in the states of Oklahoma, Massachusetts and Texas in order to set up the corporation to represent the affected community and serve as its take-over entity. There were no cases recorded where existing state statutes hindered the community's recovery effort. It also appears that there were no delays experienced while awaiting specific enabling legislation. The only evidence of hinderance surfaced in the Camarillo case where the local community leaders felt there was a delay of State Department of Transportation funds, and even in this instance, the transportation funds were not directly related to the re-use of the defense facility. These funds were a necessary part of the area (Ventura County) development plan.

State involvement was most evident in cases where regional interests were prevalent. Tennessee state officials met with various

representatives of the Smyrna area to work for a recovery beneficial to the entire region instead of allowing parochial interests to reduce the excellent possibilities of installation re-use. It was felt that ". . . this cooperative effort made possible the acquisition of airport facilities far superior to any that a single city could envision for itself in the foreseeable future [6:41]."

It was also noted that state or regional needs that did not exist solely in the nearby community were identified in several recovery efforts. Requirements such as regional vo-tech education, health care and fire and police training, items that might go unnoticed by the local re-use committee, were identified by the state and utilized in the recovery effort.

A very effective form of assistance was noted in Texas where the Texas Regional Planning Commission acted for the community in dealing with Federal and State agencies. The community in this case was Sherman/Dennison, Texas which, due to its timely planning and close cooperative effort among state and local officials, experienced one of the most successful recovery efforts in the state.

Question Four. The recovery strategies of the various communities studied reveal several common threads woven through each plan. The primary plan hinged on the use of the excess facilities and airfield, if one was available. This availability of facilities coupled with generous discounts when used for aviation, public health,

education or recreation appears to provide the impetus toward successful recovery.

Some form of a local committee or take-over entity to coordinate and manage the recovery actions was established in all cases where the final use of excess installation facilities was multiple in nature, (i.e. for industry and education, etc.). Seven communities did not form a committee and in each case the final disposition of the facilities was for a single type of end-use. It should also be noted that of these seven communities, only one (Columbus) had an airfield available for use in their recovery effort.

In most cases, efforts to attract new industry were undertaken only by those communities with an excess airfield. The fact that Chicopee-Ludlow was unable to utilize the airfield but was still successful in recruiting new industry provides the sole exception to this comment.

The basic plan for recovery was to utilize excess facilities to house new industry. In every case, this new industrial park's attraction was strengthened by the nearby availability of air transportation and cargo facilities contiguous to the industrial property. This type of program also helped to attract high paying, capital intensive industry to the "instant space" provided by the vacant facilities of a flying-mission base. The presence of such industry was found to be very important to the recovery effort because capital

intensive firms generally have a product with a high value-to-weight ratio and are more disposed to use air as a mode of shipment. Consequently, these firms were found to have the dual effect of providing steady, well paying jobs to graduates of the local educational systems while contributing to the viability of the airport through air cargo operations (34:11, 20-25).

Six of the communities included the airfield to either improve by replacement or to initiate a community or regional commercial airport. The remaining communities elected to develop the airfield to serve air cargo and business aircraft. In all cases, the communities believed the airfield would attract the new industry necessary to fuel the area's economic recovery.

Research of the case histories revealed little information as to whether the communities developed a data base of social, business, and quality of life assets to encourage industrial prospects to locate in their area. The only known cases where this was accomplished were at Orlando, Florida, Burns Flat, Oklahoma, and Newburgh, New York. The only mention in the remaining cases was that the communities worked closely with OEA to attract outside industry.

One very interesting aspect of the community recovery effort was the attempt to eliminate social deficits within the community in an attempt to attract new industry and thus needed jobs.

The most predominant method involved increasing the skills of the local labor force. This principally involved establishing vocational-technical schools. All communities that set out to attract new industry, with the exception of Kodiak Island, utilized a portion of the base facilities to set up some form of a vo-tech school. Another factor adding to the appeal of these education programs is the aforementioned fact that the acreage utilized for education purposes is eligible for a 100% discount from GSA.

The utilization of interim-use licenses which enabled the community to operate installation facilities before final conveyance of the property, was prevalent. The only cases where interim-use licenses were not used for a community considering multiple use of the facilities were in Camarillo and Novato, California. In both of these cases this was due to conflicting requests for use of excess facilities. OEA made the observation that the lack of interim-use had resulted in much deterioration to the facilities on the vacant installation and that when final conveyance of the properties involved did take place, that the grantees would be faced with a repair expense that could have been avoided had cooperation prevailed early in the communities' recovery efforts.

The case study population has provided two examples of truly excellent application of interim-use programs with clear indications of the key factor that facilitated their success: Prior planning.

In the case of Sherman/Dennison, Texas (Perrin AFB), community leaders had anticipated the possibility that the base might close and had a tentative re-use plan available before the closure announcement. The plan became the basis for the community's re-use proposal to GSA and permitted almost immediate issuance of interim-use permits. Occupancy of the base by civilian industries and services followed shortly thereafter and their contribution began to quickly compensate for the impact of the departing military.

In a similar manner, the community leaders of Orlando, Florida (McCoy AFB) had developed a contingency plan for airport development that considered the closure of the base. Orlando already operated its commercial jet traffic out of McCoy AFB under a joint use agreement at the time of the closure announcement. Due to their foresighted planning, the Orlando leadership was able to quickly submit a proposal to GSA for re-use of the base property and obtain an interim-use license within eight months of the closure announcement.

The benefits of re-use planning prior to installation closure can therefore be seen as twofold. First, should a community located near an Air Force installation be faced with recovering from its sudden closure, the availability of a re-use plan could help the community to begin receiving the benefits of recovery actions almost before a severe economic impact is experienced (26:37). Second, should the community expend the effort on re-use planning and have

the nearby installation remain open, the community has still benefited by identifying its dependencies on the neighboring installation and can set about diversifying its economy in an orderly fashion. Such a community would therefore be in command of their economic future rather than a captive partner in the future of the installation.

Question Five. Actual utilization of the excess facilities generally followed the lines of the recovery plan, as covered in Question Four. The exceptions were of two varieties. In the cases of Camarillo and Novato, California, where conflicting proposals for re-use existed, it has been left up to GSA to evaluate and decide how the property will be used. It appears that the Camarillo final disposition was a compromise between the two proposals. The Novato case has still not been finalized, however, the city of Novato has withdrawn its request so that the only proposal pending is that of Marin County.

The communities of Thomasville, Alabama and Wadena, Minnesota initially planned to use the excess facilities for local education purposes. However, after a review of the costs necessary to maintain the facilities, the communities decided not to go through with the plan. At this point, the state government entered the re-use planning picture and identified statewide needs that could utilize the facility. In the case of Thomasville, a mental health facility was established. The excess facilities at Wadena became an area (seven county) alcohol rehabilitation center.

The provisions of the Federal Surplus Property Act (27:128) provide communities substantial discounts on the surplus property of the installation for certain classes of end use. Use of parts of the installation for public airport use can result in the community receiving the land without monetary consideration. The key factor in qualifying for this discount is the favorable recommendation for use of the property for aviation from the Federal Aviation Administration (FAA). In addition, the use of surplus property for public park or recreation use and public health or educational purposes can enable GSA to convey the land to the community at discounts of up to 100% (27:128). The chance to obtain these surplus lands at substantial discounts can prove to be a real boon to the affected community. By establishing the airfield to support industry and additionally, by increasing the skills of the labor force through vo-tech education, the community has gone a long way toward attracting new industry. Thus the discount policy is in effect providing the community an inexpensive way to attract the necessary industry that will put new jobs into the community.

The researchers have made the determination that these GSA discounts undoubtedly explain the predominance of the airfield and vo-tech schools in the community recovery plans. The only obstacle related to use of the public benefit discount was the result of GSA disagreement to end use plans in the cases of Lewistown,

Montana and Columbus, Indiana. In both instances, GSA felt that some of the excess area was more appropriate for industrial use, which would entail purchase at fair market value. Further negotiations allowed both communities to obtain essentially what they requested.

Question Six. Civilian job replacement as a result of community recovery efforts is displayed in Table IV. The results speak well for the recovery methods utilized by the community. To date, 17,080 jobs have been found to replace the 7,392 jobs lost in the installation closures. Additionally, over 8,000 students are now utilizing former Air Force installation facilities for various educational pursuits.

Analysis of the Data

Conclusions as a Result of the Case Review. Analysis of the 21 cases reveals the various community recovery efforts to be very similar. The basic strategy utilized by each affected community revolved around the planned re-use of the excess airfield and related facilities to attract new industry, resulting in new jobs, to the local area. Use of surplus installation facilities was made even more attractive through GSA disposal procedures that allow the community to obtain the facilities at a fair market value without competitive bidding (27:128). Once the facilities are declared surplus by GSA, the local

Table IV
Civilian Job Replacement (16; 36)

Installation Name	Affected Community	Civilian Jobs Lost	On Base	Off Base	Jobs Gained	Students
Wildwood AFS Kodiak Tracking Station	Kenai, Alaska Kodiak Island, Alaska	65 121	185 12	15		240
Thomasville AFS	Thomasville, Alabama	18	180			
Oxnard AFB	Camarillo, California	293	517			1000
Hamilton AFB	Novato, California	1103	(Note 1)			
McCoy AFB	Orlando, Florida	472	628			1300
Bakalar AFB	Columbus, Indiana	318	282	38		100
Forbes AFB	Topeka, Kansas	83	1322			
Westover AFB ⁴⁷	Chicopee/Ludlow, Massachusetts	492	300			
Wadena AFS	Wadena, Minnesota	15	13			
Lewistown AFS	Lewistown, Montana	27	15			175
Stewart AFB	Newburgh, New York	1011	345			
Clinton County AFB	Wilmington, Ohio	550	594			1275
Clinton-Sherman AFB	Burns Flat, Oklahoma	391	698	920		500
Adair AFS	Corvallis, Oregon	180	74			
Burns AFS	Burns, Oregon	23	(Note 2)			
Ramey AFB	Aguadilla, Puerto Rico	623	1245	1000		1600
Sewart AFB	Smyrna, Tennessee	470	2100			250
Sweetwater AFB	Sweetwater, Texas	14	73			240
Perrin AFB	Sherman/Dennison, Texas	600	714	700		1325
Laredo AFB	Laredo, Texas	523 7392	610 9907	4500 7173		
						8005

Notes: (1) Installation still not being re-used.

(2) No information available from OEA.

community may file a re-use plan specifying the intended use of the former installation.

Along with the proposed industrial uses of certain facilities, several other uses were identified by the communities. In order to enhance the attractiveness of the community to prospective new industry, other facilities were developed for education, public health and public recreation uses. The result was to reduce many long standing social deficits within the community as well as increase the skills of the local labor force. Public discounts of up to 100% of the fair market price were allowed when facilities were used in such a manner. Use of these discounts was pervasive.

The importance of the airfield and facilities capable of supporting industry was highlighted during reviews of the recovery efforts of the six communities affected by the closures of installations without airfields. In each case, the community elected to reduce outstanding social deficits with the excess facilities. Although attracting industry was not the immediate concern, the community felt that such improvements would succeed in attracting increased commerce over the long run.

The recovery efforts analyzed in the research mirror the basic recovery strategy espoused by OEA in 1972 (50:6-10). The consistent use of this strategy, as revealed in the analysis of cases, coupled with the successful job recoveries in the affected communities

indicates the success of OEA plan. It is this very success that has thwarted the researchers' attempts to identify a set of economic recovery plans. There in fact exists only one basic strategy with variations necessary according to the particular community. For this reason the researchers will concentrate on the three basic tenets of the individual community recovery plan before providing a comprehensive community recovery framework. These three basic tenets are commerce, human resources and community facilities.

Commerce. In order to generate new jobs for the community, it is necessary to attract new industry and expand current businesses. For the community to be successful, the community leaders must have a definite plan for finding and securing the proper prospects. Use of excess facilities on the installation will be the core of the recruiting plan. It is felt by OEA that there are many firms attracted to "ready to occupy" facilities as offered by the surplus installations (34:11-12; 26:50). Additionally, the airfield located within the proposed industrial park is very attractive to industries that utilize air cargo to a large degree. Review of the cases for this research effort reveals that the airfield played an important part in the recovery effort.

OEA has recommended that the local community concentrate its efforts on attracting capital intensive or skills intensive industry, thus requiring a larger percentage of white collar workers (34:11-12).

Concentrating on this type of industry, the next step is to embark on a vigorous advertising program. Brochures should be developed to show the prospective industries the facilities available. The combination of an available airfield and nearby ready-to-use industrial facilities should be very attractive in a brochure designed to attract potential industry. The final point both emphasized by OEA and utilized in the cases reviewed is that the target industries for relocation to the excess installation should be based in other locales. Simply moving firms already established in the community to the installation will not generate the jobs needed to recover. However, don't forget to examine the potential of local industries for expansion which, if feasible, would generate new jobs (25:9).

Human Resources. The roadblock to successfully attracting new job producing industry for a community may be the result of deficiencies in human resources. If the skills required by new industry are not available in the community, utilization of several of the excess facilities for vocational-technical training may become a valuable investment. In the case review it was found that every community that set out to attract new industry did in fact establish some form of vo-tech education. Some of these facilities were designed to serve a several county region as well as the local community as in the case of Wilmington (26:46). A steady source of skilled labor has proven very effective in attracting industry. Use of facilities for

educational purposes enables the community to apply for public use discounts that can amount to up to 100% of the fair market value of these facilities.

Community Facilities. Many communities benefit from the use of excess installation property to enhance existing public services that directly impact the quality of life. Community deficits in recreation facilities can often be eliminated through the use of excess facilities on the installation. The case review revealed communities that improved the public health services for the area. Additionally the base housing was converted to low income housing to improve the quality of life in a particular community. In this area of community improvement, the local residents benefit as in educational uses of the base. The community is eligible to receive public discount allowance of up to 100% when using facilities in this manner.

CHAPTER IV

PRESENTATION OF A FRAMEWORK

Overview

The case review, as conducted by the researchers and as analyzed in the previous sections of this paper has provided what the researchers feel to be a reasonable synopsis of community recovery techniques from the economic impact of the closure of a nearby Air Force installation. Based on this review and the preceding analysis of Chapter III, the researchers have summarized the necessary actions that a community needs to accomplish in order to work toward a successful recovery. This summary is provided in Table V. It should be noted that many of these actions are recommended for community accomplishment prior to the actual decision to close the nearby military installation.

Discussion of the Community Framework

The Advantage of Early Re-use Planning. The current DOD policy of announcing a set of candidate bases under study for closure while the Environmental Impact Assessment Process (EIAP) is carried out, affords the potentially impacted communities an opportunity to have

Table V
Community Framework

I. Establish Recovery Committee

1. Determine what facilities will be available if proposal becomes final.
2. Determine if the airfield will be available.
3. Determine if proposal maintains portions of the facility for continued military use.
4. Establish contacts with state and regional officials.

II. Begin Planning Recovery Strategy

1. Analyze community dependencies upon the military installation (utilize DEIS).
2. Evaluate community needs in light of the revealed dependencies as well as the proposed Air Force action.
3. Insure zoning is compatible with the proposed re-use plan.
4. Analyze regional/state assistance necessary.
 - a. Determine if enabling legislation is required.
 - b. Seek appointment of a multi-county take-over entity if more than the immediate area can benefit from the recovery.
 - c. Determine if the state has proposed uses for parts of installation.

III. Attract Industry

1. Determine what part airfield will play.
2. Determine facilities to be utilized.

Table V (continued)

3. Develop a solicitation package that highlights facilities available.
4. Solicit new industry from outside the local area.
5. Analyze local industry for those considering possible expansion.

IV. Human Resources

1. Analyze labor skills available in community.
2. Determine types of training that would assist the local labor force--thus making community more attractive for industry.
3. Identify regional/state educational needs that could be served by some of the excess facilities.

V. Community Facilities

1. Determine facilities that could be utilized to alleviate community deficits (i.e. need for hospital or public health facilities).
2. Review existing installation recreational facilities to determine if they can serve community needs.
3. Determine discounts available, so that proper economic analysis can be made within these categories.

VI. Steps After Closure Announcement

1. Begin the challenge of recruiting industry.
 - a. Send out data book concerning facilities as to what industry might find useful.
 - b. Brief proposed community improvements to industry prospects.

Table V (continued)

2. Complete the comprehensive re-use plan to allow application for interim use of the installation.
 - a. This action will prevent deterioration of facilities.
 - b. Can now begin educational/recreational improvements--thus demonstrating to industrial prospects the community is earnest in its recruitment efforts.

recovery proposals either completed or well under way when the decision process is complete. It is the opinion of the researchers that a community that takes such action is at a distinct advantage whether its installation is selected for closure or not. Previous analysis of the contribution that prior re-use planning makes to the expeditious issuance of interim-use license makes the described advantage obvious in the case of the community that loses its installation. Such a community with a re-use plan available for rapid implementation was found to avoid the more severe impact that otherwise would have occurred.

The advantage to communities that retain their military neighbors is more obscure, but becomes clearer when the degree of dependence most communities have on military installations is considered. The large degree of social and economic interdependence between civilian communities and nearby military installations, has already been established (26:1-2). Often the area economy is principally directed toward support of the installation (26:1-2).

Consequently, any re-use planning predicated on the possible closure of the nearby installation should serve to not only identify these dependencies, but also provide the motivation to do something about them even though the installation remains open. An economic diversification program based on such plans could proceed in an orderly fashion, and enhance the quality of life, and provide economic stability should the base close at a later date. The researchers have no firm evidence to support the idea that the formal identification of the economic interdependencies between civilian and military communities will provide the motivation to communities to implement their plan. However, the researchers are encouraged by the fact that the case studies displayed evidence of a development momentum in many communities where areas of the economy not related to the closed installation were improved by active development programs once the community became active in planning its future rather than depending on the military.

Section I. The actions delineated in Section I of the Community Framework provide the general guidance for the community to get their plan started. Though simply stated, the four actions can be remarkably complex. For example, the airfield may be available from the Federal Government for re-use, but community noise and related environmental considerations may limit or entirely prevent its use as an airport. Partial retention of a facility by the government

has been found by the researchers to be a significant complication in the successful re-use of Federal facilities. The problems experienced by the communities of Chicopee and Ludlow, Massachusetts in the re-use of Westover AFB are a good example of the planning problems such complexities can present. Finally, the researchers determined from the analysis of the case studies that the establishment of an overall recovery committee to guide the economic development effort was the most critical and pervasive action taken in successful recoveries. In instances such as Novato and Camarillo, California, the absence of a city-county development body to coordinate the community re-use effort contributed to the conflicting re-use plans and delayed the recovery effort. In Burns, Oregon the local community took no action in the recovery at all until the Governor's office provided the integrating leadership to coordinate the productive re-use of Adair AFS. Rapid establishment of a comprehensive recovery committee and re-use plan have been found by the researchers to be the actions central to a successful recovery effort.

Once the community's basic posture with regard to re-use of the military installation is initially determined in Section I, the community must begin to formulate economic development strategies concerning how available land and facilities will be used to meet their development objectives. Review of the 21 cases in this research has convinced the researchers that the general recovery

strategy followed by OEA takes maximum advantage of Federal re-use statutes and affords communities the best chance for recovery.

Sections II through VI are based on OEA's recovery strategy and are seen by the researchers to be applicable to all realignment actions.

Section II. This section addresses the actions the community must take to determine how the facilities that are slated to become available at the nearby installation can best meet the development needs of the community. Economic interdependency data should be available in the DEIS, and will probably represent the worst-case situation (11). Consequently, if the community can counteract the predicted economic impact, successful recovery is highly probable.

The community should also direct its attention to quickly resolving planning aspects which are normally time consuming processes.

Local zoning regulations must be reviewed, and changed if necessary, to insure that proposed recovery actions will not be contested after considerable time and development effort has been spent. Similarly, state government requirements regarding the community's development plan must be identified early. Should a multi-county or regional effort be required, the researchers found that the creation of a regional take-over entity was necessary to permit efficient contact with Federal agencies. In several cases (e.g. Sherman /Dennison, Texas and Chicopee/Ludlow, Massachusetts) the creation of such bodies required enabling legislation, and legislation takes time. The

researchers decided that the earlier this requirement is identified, the better the community position will be.

Section III. This is the first framework component to specifically address the OEA recovery strategy. The principle thrust behind this component is the identification and solicitation of those industries that can best contribute to the development of the commercial section of the affected community. The key concerns found to occur on a continuing basis in the case studies are tied to maximum utilization of the industrial facilities provided as an adjunct to airfield operation, and the attraction of capital-intensive industry to the area in order to establish high paying employment. These two considerations were found to be complementary since capital-intensive industries generally have a product of sufficient value to preclude high levels of inventory in field and therefore require air transportation (34:11-15).

Section IV. This section addresses the area of human resources that are necessary to support the economic recovery effort. The case studies revealed the vitally important role educational facilities play in attracting desirable industry to a community. This role is specifically related to the skill level of the local labor force, and further serves as a quality-of-life consideration for the families of prospective employees. Consequently, the communities studied were found to direct considerable effort to establishing educational facilities on

surplus installation property in order to exploit these considerations.

The resulting educational institutions were used to upgrade the skill level of the local human resource and provide labor for new industry.

Section V. This section is directed at actions intended to exploit the defense reduction as means of correcting community deficits in the area of community facilities. Information in the case studies established that improvement of public-use facilities in a recovery effort need not be restricted to areas related to the base, although facilities there generally provide ample opportunity for exploitation. The community of Lewistown, Montana chose to further exploit their status as an impact area to acquire a high degree of support for the construction of a new hospital not associated with the nearby surplus installation (26:21).

Section VI. The final section implements the plan once a closure decision takes place and completes the community-action recovery framework.

The Air Force Planner Framework

The researchers recognize that many of the recommended community actions require close coordination with members of the closing installation if they are to be effective. Facility re-use plans require detailed knowledge of what types of buildings will be available their utility costs and capabilities, and their general condition.

Therefore, the researchers determined that a corresponding framework of actions intended to help guide the Air Force planner to properly interface with the community's recovery effort would be required. Such guidelines would have the added benefit of providing the Air Force planner the common strategy used by OEA and should, in the opinion of the researchers, smooth the interactions among OEA, the local community, and installation representatives. The framework of planners' actions intended to support the community's recovery effort is contained in Table VI.

The Air Force planners' support of the community recovery effort is initiated by the presentation of the community action framework to area leaders. Concomitant with this action, the AF planner should make every effort to also provide the community with information in Sections I and II of the Planners Framework. This information should be presented in a format keyed to use of the Community Recovery Framework to help provide the impetus to the community to begin recovery planning without delay. The AF planner should experience minimum difficulty in performing this task since much of the required information must be compiled for inclusion in the DEIS. Of particular interest is item I. 3 which refers to the availability of land parcels for civilian re-use contiguous to land areas reserved for continuing military missions. The researchers determined that in at least three of the cases studied, this type of partial closure

Table VI
Air Force Planner Framework

- I. Analyze the specifics of the proposed action.
 1. Will all facilities be excessed?
 2. Will an airfield be made available?
 3. If not, will parcels be excessed adjacent to land that is retained for military use?

- II. Develop Information Package for Community.

1. Provide maps of areas to be excessed.
2. Provide information on individual facilities.
 - a. Maintenance costs
 - b. Size, use, and condition
3. Provide utility plans and operations costs.

- III. Maintain Liaison with Community Effort

1. Participate in the continuing community recovery planning to help identify how surplus facilities can meet the requirements of actions programmed by the community.
2. Coordinate on planned uses of the surplus facilities to insure compatibility with remaining military missions, for both the long-term, and during the phase-down of departing units.

resulted in delayed or more difficult recoveries. Utilities operation and maintenance in such areas are generally points of conflict. The location and successful solicitation of industry compatible with the continued defense mission to re-use such parcels has also been found

to be difficult. The Air Force planner can go a long way to facilitate the property disposal process for both DOD and the local community if partial closures can be avoided. Since total avoidance will not be possible, the Air Force should strive to excess continuous land areas rather than isolated parcels interspersed with land retained for military use.

Section III in the Planner's Framework is intended to stimulate active and continued participation of the Air Force planner in the community's recovery effort. The Air Force facilities manager can provide a valuable, ongoing input concerning ways the available facilities can help alleviate the community's economic dependence on the installation. His willingness to provide timely and comprehensive facility information can be a significant contribution to the earliest possible elimination of the Air Force's maintenance responsibility for the installation should the decision be made to close it.

Conclusion

The researchers believe that the two frameworks are mutually supportive and, further, that the components of the Community Recovery Framework are sufficiently comprehensive to be of value in all Air Force closure actions. The three principal development areas of community facilities, human resources, and the commercial sector can be employed independently if the impacted community is already strong in a particular area. Conversely, in

impacted communities that were almost totally devoid of strength in these areas, the framework interlocked and the components complemented each other to such a degree that they became a complete recovery program that made maximum use of the highly favorable aspects (e.g. public benefit discounts) of Federal surplus property laws (39).

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary

This research effort initially set out to develop a general set of recovery programs that would be of value to communities seeking ways to mitigate the impact of the closure of a nearby Air Force Base. It was the a priori contention of the researchers that communities that have accomplished successful recoveries in similar circumstances based their programs on the development of assets intrinsic to their area. This contention led to the belief that a set of programs appropriate for a particular class of community (e.g. agricultural, transportation hub, rural, etc.), could be developed by historical case studies of previous recovery efforts. The researchers modified the earlier research methodology of Mr. Daicoff in defining the employment loss threshold where significant impact can be said to have occurred. Therefore, communities that experienced an Air Force installation closure or reduction that resulted in civilian job losses that were greater than one percent, but less than three percent of the local work force were included in this research as having experienced a moderate impact. Those

communities experiencing a greater than three percent civilian job loss were included in the severe impact classification. These categorizations alone, however, would ignore impacts on communities where the installation military population was much greater than its civilian work force. In order to recognize such impacts, the research population were further modified to include communities that experienced military and civilian job losses greater than or equal to two percent of the local work force in the moderate impact category.

These decision rules for defining the research population were applied to all closures or reductions that occurred in the 50 states and Puerto Rico during the period 1969 to 1975 inclusive. The principal source of community-recovery data for this research was the case files of the Office of Economic Adjustment in Washington, D.C.

Application of the research methodology resulted in the detailed study of 21 communities that were impacted by the closure of nearby Air Force installations according to six standard questions in Appendix B. Analysis indicated that while unique community characteristics played a role in the specific details of a community's recovery strategy, they were not a distinguishing factor among the community classifications insofar as a community's overall recovery strategy was concerned. For example, improvement of human

resources through increased vocational-technical education programs was a pervasive strategy regardless of community classification. Consequently, a set of general recovery programs based on the intrinsic assets of impacted areas was determined by the researchers to be inappropriate. Instead, the researchers formulated a Community Action Framework and an Air Force Planner Framework that present a general recovery strategy that can be followed to help mitigate the severity and duration of economic impact. The Frameworks are based on the three-pronged recovery strategy of the OEA that was found to have varying degrees of success in the case histories. The OEA program consists primarily of the re-use of surplus installation facilities to develop human resources, correct community facility deficiencies and improve the commercial sector of the local economy. Heavy emphasis is also placed on the formation of an "umbrella" development body in the local community to coordinate and manage the community's programs.

The researchers further determined that the degree of impact (i.e. moderate vs severe) as defined in this research had little, if any, effect on the program strategies employed in the economic recoveries of the communities studied. Recovery programs also seemed to be facilitated by the complete departure of the military. Recovery programs were extended where re-use efforts had to interface with continued military missions.

Finally, the researchers determined that the Frameworks could best be employed as impact mitigation devices if they were brought into play immediately after a community is selected as a candidate for a defense impact. Hence, the community would be planning to recover from an impact before it actually occurs. The truly noteworthy impact recovery accomplished by Sherman-Dennison, Texas due to their pre-impact planning supports this determination. The researchers also believe that those candidate communities that begin recovery planning but are not in fact impacted will not have expended fruitless effort. Their plans, if followed in spite of the military's continued presence could lead to diversification of their economies, and less dependence on future defense requirements.

Conclusions

Research Question One. The researchers made the following conclusions in the resolution of research question one.

1. Only one framework of a general strategy was found to be extant in the case histories. Therefore, intrinsic assets of the communities studied made little if any difference in recovery plans. This fact contradicts the a priori contention of the researchers that assets intrinsic to the area surrounding an affected installation were a driving force in the selection of appropriate recovery strategies

by the communities involved. This contention was the basis for the inclusion of question two in the research instrument, but after reviewing the case histories of 21 communities' recovery efforts, the researchers can no longer support this contention.

2. The general strategy contained in the framework should consist of the three-pronged recovery strategy used by OEA, which is directed toward the development of community facilities, human resources, and the commercial sector of the affected community.

3. Strategies such as those contained in the framework should be implemented as soon as possible after a nearby base is selected as a candidate for closure. The Air Force planner should support community planning efforts as much as possible to maximize identification of potential re-uses. The greater the number of opportunities for successful recovery that can be identified will, in the opinion of the researchers serve to mitigate the impact perceived by the community.

4. Early implementation of strategies in the framework results in early availability of the community re-use proposal for the installation property, as well as the development of a general economic development plan. The base need not close in order for this community action to be beneficial. As was often the case in the data for this research, the recovery plan developed in response to the potential loss of the nearby military installation might well be the

first comprehensive economic development program planned in the community. Its availability provides the opportunity for the community to diversify its economic base and be better prepared should the nearby installation close in the future.

5. Considerations mentioned in conclusions three and four above, are necessary for affected communities to receive interim-use licenses with minimum delay. They also offer maximum compatibility with Federal assistance available through OEA after the decision to close a candidate installation becomes firm.

Research Question Two. The researchers could find no relation between the recovery strategies that were found to be appropriate and the degree of impact, (moderate versus severe as defined in this research).

Recommendations

The researchers believe that the contents of the frameworks presented in Chapter IV provide the Air Force planner and community with a practical starting point in developing a recovery strategy that will mitigate the impact of a proposed installation closure. It is recommended that this information be provided to Air Force planners, tasked with preparation of Draft Environmental Impact Statements for installation closures, in the form of a handbook.

The researchers also believe that although Air Force use of the Frameworks would be more helpful in mitigating closure

impacts than current practice, their use is actually a substitute for what is more appropriately OEA action. The Frameworks are intended to assist the community during the limbo period between the publication of a DEIS that identifies a community as a candidate for a defense impact and the final determination of whether that impact will occur. It is the opinion of the researchers that OEA's high degree of expertise in economic recovery would facilitate greater impact mitigation during this limbo period than Air Force use of the Frameworks alone. Therefore, we recommend that DOD Directive 5410.2 (18:1-2) be amended to include potential impact as a result of a reduction announcement as a defined impact that qualifies for OEA technical assistance. Such an amendment would permit OEA assistance to be available immediately after the community impact becomes a possibility rather than after the impact has actually occurred. Furthermore, by explicitly stating that OEA can formally assist communities that are merely candidates for defense impact, this amendment will prevent the misconception that OEA's presence might be indicative of the Air Force's predisposition to impact a given locality before the official decision has been made.

APPENDIX A

AIR FORCE INSTALLATIONS AFFECTED
BY REALIGNMENTS, 1969-1975

This appendix contains excerpts from official DOD news releases describing Air Force installations affected by realignments during the period 1969 to 1975, inclusive. This time period encompasses five major announcements, each of which is presented in the order of occurrence. The personnel figures listed by each named installation are reductions unless specifically denoted by a plus (+). An asterisk (*) denotes installations programmed for closure. If the applicable column indicates that the affected community did request OEA assistance, the percentage of local labor force affected was calculated. Labor force statistics for a particular county or SMSA were found in County Business Patterns (19) for the particular time frame of the closure announcement. If a second percentage is listed in the Percentage of Labor Force column, it is the combination military-civilian affect on the community (see pp. 22-23 for a complete discussion concerning this topic).

Notes Concerning Announcements

1. Reconnaissance visit but no further assistance (18).
2. Little involvement and no permanent record maintained (18).
3. Technical assistance was requested. Recovery planning not performed (18).
4. Plan never carried through (18).

5. A defense dependence study was conducted at the request of the community (18).
6. This proposed action has yet to be carried out. See page 10 of this research.
7. Recovery assistance has not been given since 1967 when the Rome AMA was closed. However, an economic analysis for the Air Force, concerning proposed realignments, was accomplished 1974-75 (57:6).
8. An initial reconnaissance visit was performed. The state of Texas is handling the recovery (18).
9. Initial reconnaissance visit made, but no further action up to this point (18).

I. Announcement of 24 April 1969

Installation Affected	City/State	Personnel Affected	Requested OEA	Percentage of Assistance Work Force	Impact Category
Fire Island AFS Driftwood Bay DEW Station	Anchorage, Alaska Dutch Harbor, Alaska	145 26	6 1	No No *	
Northeast Cape AFS	Kulowiyi, Alaska	33	1	No *	
Port Heiden DEW Station	Port Heiden, Alaska	25	1	No *	
Port Moller DEW Station	Port Moller, Alaska	25	1	No *	
Unalakleet AFS	Unalakleet, Alaska	85	12	No *	
Cape Sarichef DEW Station	Unimak, Alaska	25	1	No *	
Hamilton AFB	Novato, California	602	204	No	
755th Radar Squadron	Arlington Hts, Illinois	74	3	No	
Waverly AFS	Waverly, Iowa	138	21	See Note 1 *	
Topsham AFS	Topsham, Maine	620	100	See Note 2 *	
Chandler AFS	Chandler, Minnesota	138	121	See Note 3 *	
Malmstrom AFS	Great Falls, Montana	96	7	No	
Bellefontaine AFS	Bellefontaine, Ohio	136	27	See Note 2 *	
Adair AFS	Corvallis, Oregon	749	180	Yes *	2.0
Perrin AFB	Sherman/Dennison, Texas	126	1	No	Moderate
Sweetwater AFS	Sweetwater, Texas	136	14	Yes *	.8/8.3
					Moderate

II. Announcement of 29 October 1969

Installation Affected	City/State	Personnel			Percentage of Impact	Impact Category
		Affected Mil	Civ	OEA Assistance		
Maxwell AFB	Montgomery, Alabama	43	0	No		
Gunter AFB	Montgomery, Alabama	514	36	No		
Thomasville AFS	Thomasville, Alabama	110	18	Yes*	.3/2.3	Moderate
Elmendorf AFB	Anchorage, Alaska	739	99	No		
Little Rock AFB	Little Rock, Arkansas	950	1	No		
George AFB	Adelanto, California	650	0	No		
Oxnard AFB	Camarillo, California	1284	293	Yes*	.5/2.8	Moderate
Los Angeles AFS	Los Angeles, California	55	21	No		
Travis AFB	Fairfield, California	209	3	No		
Vandenburg AFB	Lompoc, California	1300	200	No		
Hamilton AFB	Novato, California	79	137	No		
Edwards AFB	Rosamond, California	249	176	No		
McClellan AFB	Sacramento, California	893	42	No		
Norton AFB	San Bernardino, California	60	85	No		
March AFB	Sunnyvale, California	88	10	No		
Ent AFB	Colorado Springs, Colorado	235	97	No		
Bolling AFB	Washington, D.C.	367	490	No		
Patrick AFB	Cocoa Beach, Florida	100	116	No		
Homestead AFB	Homestead, Florida	1090	2	No		
Eglin AFB	Valparaiso, Florida	205	157	No		

II. Announcement of 29 October 1969 (continued)

Installation Affected	City/State	Personnel Affected	Requested OEA	Percentage of Assistance	Labor Force Category
		Mil	Civ		
Tyndall AFB	Panama City, Florida	94	20	No	
McCoy AFB	Orlando, Florida	814	7	No	
Robins AFB	Warner-Robins, Georgia	95	45	No	
Hickam AFB	Honolulu, Hawaii	1666	163	See Note 3	
Wheeler AFB	Wahiawa, Hawaii	35	0	No	
Scott AFB	Belleville, Illinois	212	46	No	
Grissom AFB	Bunker Hill, Indiana	1418	228	No	
Bakalar AFB	Columbus, Indiana	23	395	Yes*	
Hulman Field	Terre Haute, Indiana	167	4	See Note 2*	
Forbes AFB	Topeka, Kansas	748	7	No	
England AFB	Alexandria, Louisiana	745	0	No	
Barksdale AFB	Bossier City, Louisiana	82	10	No	
Andrews AFB	Suitland, Maryland	84	39	No	
Hanscom Field	Bedford, Massachusetts	19	31	No	
Otis AFB	Falmouth, Massachusetts	1746	45	No	
Custer AFS	Battlecreek, Michigan	776	153	See Note 2*	
Selfridge AFB	Mount Clemens, Michigan	1928	300	See Note 4	
Port Austin AFS	Port Austin, Michigan	89	11	No	
Keesler AFB	Biloxi, Mississippi	56	39	No	
Richards Gebaur AFB	Kansas City, Missouri	+385	174	No	
Offutt AFB	Bellevue, Nebraska	337	25	No	
Las Vegas AFS	Las Vegas, Nevada	117	17	No	
McGuire AFB	Wrightstown, New Jersey	85	+128	No	

II. Announcement of 29 October 1969 (continued)

Installation Affected	City/State	Personnel Affected	Requested OEA Assistance	Percentage of Labor Force	Impact Category
		Mil	Civ		
Kirtland AFB	Albuquerque, New Mexico	26	18	No	
Stewart AFB	Newburgh, New York	2464	1011	Yes*	2.1
Griffis AFB	Rome, New York	46	38	No	Moderate
Suffolk County AFB	Long Island, New York	1235	296	See Note 2*	
Seymour Johnson AFB	Goldsboro, North Carolina	581	4	No	
Pope AFB	Springlake, North Carolina	588	4	No	
Minot AFB	Minot, North Dakota	99	+8	No	
~ Wright-Patterson AF ²⁸ B	Fairborn, Ohio	107	515	No	
Lockbourne	Columbus, Ohio	16	4	No	
Clinton Sherman AFB	Burns Flat, Oklahoma	2713	391	Yes*	8.4
Oklahoma City AFS	Oklahoma City, Oklahoma	276	43	No	Severe
Tinker AFB	Oklahoma City, Oklahoma			No	
Shaw AFB	Sumter, South Carolina	160	7	No	
Stewart AFB	Smyrna, Tennessee	6033	470	Yes*	3.6
Dyes AFB	Abilene, Texas	352	0	No	Severe
Bergstrom AFB	Austin, Texas	25	5	No	
Ellington AFB	Houston, Texas	81	0	No	
Perrin AFB	Sherman/Dennison, Texas	814	106	No	
Lackland AFB	San Antonio, Texas	79	0	No	

II. Announcement of 29 October 1969 (continued)

Installation Affected	City/State	Personnel		Requested	Percentage	Impact
		Affected Mil	Civ	OEA Assistance	of Labor Force	
Brooks AFB	San Antonio, Texas	36	26	No		
Kelley AFB	San Antonio, Texas	1103	250	See Note 3		
Randolph AFB	Universal City, Texas	170	113	No		
Hill AFB	Ogden, Utah	7	31	No		
Langley AFB	Hampton, Virginia	584	20	No		
McChord AFB	Tacoma, Washington	1135	99	No		
Truax Field	Madison, Wisconsin	220	60	Yes*	.01	Negligible

III. Announcement of 6 March 1970

Installation Affected	City/State	Personnel Affected	Requested OEA	Percentage of Labor Force	Impact Category
		Mil	Civ	Assistance	
Dauphin Island AFS	Coden, Alabama	112	26	Yes*	.01
Craig AFB	Selma, Alabama	36	15	No	Negligible
Luke AFB	Litchfield Park, Arizona	+661	270	No	
Davis Monthan AFB	Tucson, Arizona	182	+76	No	
Little Rock AFB	Little Rock, Arkansas	+77	55	No	
George AFB	Adelanto, California	81	45	No	
Los Angeles AFS	Arbor Vitae, California	1	77	No	
Annex 1					
Travis AFB	Fairfield, California	512	43	No	
Vandenburg AFB	Lompoc, California	+33	82	No	
Beale AFB	Marysville, California	114	62	No	
Hamilton AFB	Novato, California	201	77	No	
Red Bluff AFS	Red Bluff, California	103	20	No	
Edwards AFB	Rosamond, California	128	148	No	
McClellan AFB	Sacramento, California	+94	886	No	
Norton AFB	San Bernardino, California	1169	94	No	
March AFB	Sunnymead, California	353	57	No	
Lowry AFB	Denver, Colorado	218	83	No	
Dover AFB	Dover, Delaware	1381	100	No	
Patrick AFB	Cocoa Beach, Florida	239	140	No	
Cross City AFS	Cross City, Florida	103	20	No	
Homestead AFB	Homestead, Florida	288	68	No	
Cudjoh Key AFS	Perky, Florida	329	0	See Note 2*	
Tyndall AFB	Springfield, Florida	151	18	No	
McCoy AFB	Taft, Florida	77	43	No	

III. Announcement of 6 March 1970 (continued)

Installation Affected	City/State	Personnel Affected	Requested OEA	Percentage of Assistance	Labor Force	Impact Category
McDill AFB	Tampa, Florida	692	61	See Note 3		
Eglin AFB	Valparaiso, Florida	8	173	No		
Robins AFB	Warner Robins, Georgia	640	159	No		
Hickam AFB	Honolulu, Hawaii	261	29	No		
Wheeler AFB	Wahiawa, Hawaii	131	40	No		
Mountain Home AFB	Mountain Home, Idaho	788	52	No		
Chanute AFB	Rantoul, Illinois	393	97	No		
Griswom AFB	Bunker Hill, Indiana	+109	41	No		
Forbes AFB	Topeka, Kansas	+101	42	No		
McConnel AFB	Wichita, Kansas	230	54	No		
England AFB	Alexandria, Louisiana	492	39	No		
o Barksdale AFB	Bossier City, Louisiana	120	40	No		
Houma AFS	Houma, Louisiana	112	18	See Note 2*		
Loring AFB	Limestone, Maine	114	67	No		
Andrews AFB	Suitland, Maryland	141	124	No		
Hanscom Field	Bedford, Massachusetts	30	304	No		
Westover AFB	Chicopee/Ludlow, Massachusetts	+114	153	No		
K I Sawyer AFB	Gwinn, Michigan	+69	52	No		
Wurtsmith AFB	Oscoda, Michigan	+116	40	No		
Wadena AFS	Wadena, Minnesota	115	15	Yes*	.7/5.6	Moderate
Keesler AFB	Biloxi, Mississippi	317	522	No		
Malmstrom AFB	Great Falls, Montana	+128	52	No		
Offutt AFB	Bellevue, Nebraska	+99	83	No		
Nellis AFB	Las Vegas, Nevada	423	97	No		
Tonopah AFS	Tonopah, Nevada	113	22	No		

III. Announcement of 6 March 1970 (continued)

Installation Affected	City/State	Personnel			Requested		Percentage of Impact
		Affected Mil	Civ	OEAI Assistance	Labor Force	Category	
Pease AFB	Newington, New Hampshire	+125	54	No			
Palermo AFS	Palermo, New Jersey	108	19	No			
McGuire AFB	Wrightstown, New Jersey	1591	+49	No			
Holloman AFB	Alamogordo, New Mexico	442	567	No			
Plattsburgh AFB	Plattsburgh, New York	+259	51	No			
Griffiss AFB	Rome, New York	+208	208	No			
Seymour-Johnson AFB	Goldsboro, North Carolina	308	49	No			
Winston-Salem AFS ²²	Winston-Salem, North Carolina	130	20	No			
Minot AFB	Minot, North Dakota	+217	59	No			
Wright-Patterson AFB	Fairborn, Ohio	+21	398	No			
Lockbourne AFB	Lockbourne, Ohio	+494	55	No			
Burns AFS	Burns, Oregon	104	23	Yes*	1.6	Moderate	
Condon AFS	Condon, Oregon	118	24	No			
Charleston AFB	Charleston, South Carolina	892	+83	No			
Shaw AFB	Sumter, South Carolina	19	64	No			
Ellsworth AFB	Box Elder, South Carolina	+338	61	No			
Dyess AFB	Abilene, Texas	39	40	No			
Bergstrom AFB	Austin, Texas	+21	57	No			
Carrollton AFB	Forth Worth, Texas	1081	84	No			

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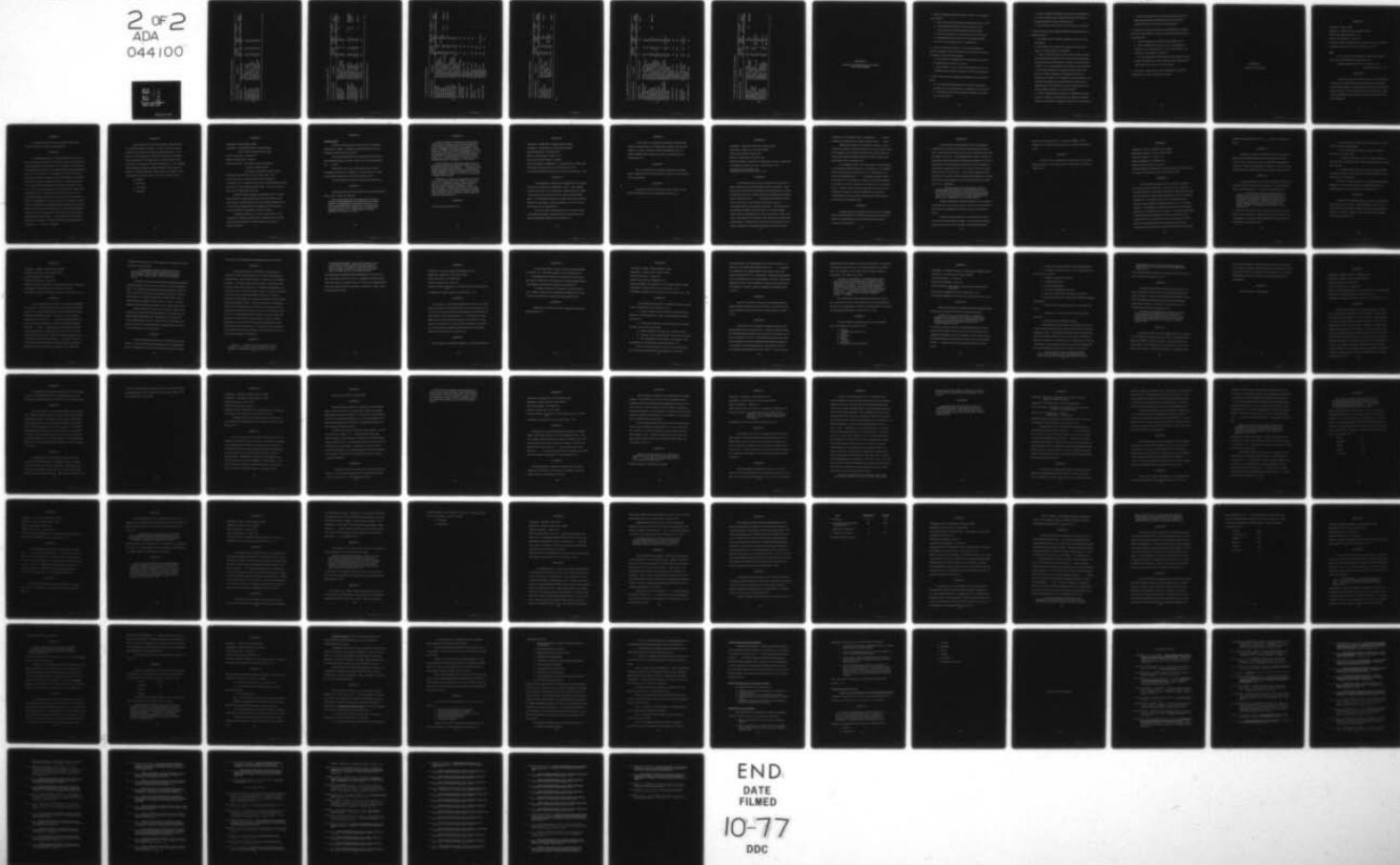
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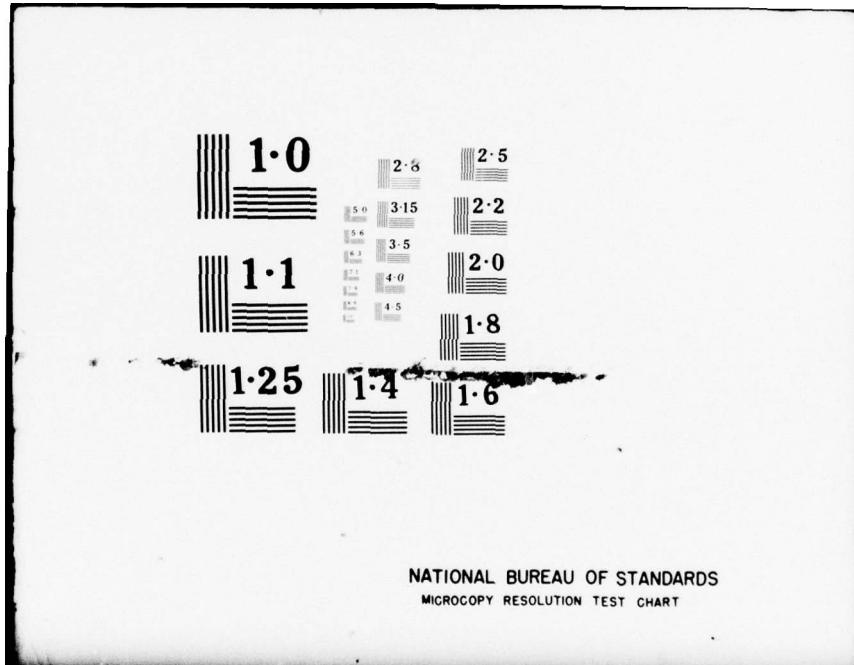
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III. Announcement of 6 March 1970 (continued)

Installation Affected	City/State	Personnel		Requested		Percentage		Impact Category
		Affected	OEA	Civ	Assistance	Labor Force	of	
Perrin AFB	Sherman-Dennison, Texas	490	112	No				
Goodfellow AFB	San Angelo, Texas	189	42	No				
Kelley AFB	San Antonio, Texas	316	563	No				
Lackland AFB	San Antonio, Texas	271	94	No				
Randolph AFB	Universal City, Texas	+67	50	No				
Sheppard AFB	Wichita Falls, Texas	128	139	No				
^o Langley AFB	Hampton, Virginia	+116	99	No				
Fairchild AFB	Airway Hts, Washington	+92	69	No				
McChord AFB	Tacoma, Washington	769	+8	No				

IV. Announcement of 13 March 1971

Installation Affected	City/State	Personnel Affected	Requested OEA	Percentage of Assistance	Labor Force Category	Impact
		Mil	Civ			
Wildwood AFS	Kenai, Alaska	374	65	Yes	4.8	Severe
Tyndall AFB	Panama City, Florida	250	0	No		
England AFB	Alexandria, Louisiana	86	0	No		
Otis AFB	Falmouth, Massachusetts	491	11	No		
Duluth Int'l Airport	Duluth, Minnesota	765	51	Yes	.1/1.3	Negligible
Lewistown AFB	Lewistown, Montana	108	27	Yes	1.5	Moderate
Clinton County AFB	Wilmington, Ohio	50	550	Yes	8.6	Severe
Lockbourne AFB*	Columbus, Ohio	2300	+260	No		
Kingsley Field	Kingsley, Oregon	920	272	No		
84 Perrin AFB	Sherman-Dennison, Texas	1450	600	Yes	3.1	Severe
Randolph AFB	San Antonio, Texas	500	0	No		

*Base renamed Rickenbacker AFB in 1974.

V. Announcement of 17 April 1973

Installation Affected	City/State	Personnel Affected	Requested OEA	Percentage of Labor Force	Impact Category
		Mil	Civ	Assistance	
Hamilton AFB	Novato, California	990	453	No	
Edwards AFB	Rosamond, California	196	40	No	
Mather AFB	Sacramento, California	184	7	See Note 3	
McCoy AFB	Orlando, Florida	2930	472	Yes+	.2/2.2
Robins AFB	Warner-Robins, Georgia	+182	383	No	Moderate
Forbes AFB	Topeka, Kansas	1241	83	Yes+	.1/2.5
McConnel AFB	Wichita, Kansas	83	+107	No	
England AFB	Alexandria, Louisiana	365	+65	No	
Barksdale AFB	Bossier City, Louisiana	18	74	No	
Hanscom Field	Bedford, Massachusetts	237	536	No	
55 Westover AFB	Chicopee-Ludlow, Massachusetts	1300	163	No	
Otis Air National Guard Base	Falmouth, Massachusetts	377	297	No	
McGuire AFB	Wrightstown, New Jersey	294	87	No	
Kirtland AFB	Albuquerque, New Mexico	+7	40	No	
Seymour-Johnson AFB	Goldsboro, North Carolina	108	+58	No	
Pope AFB	Springlake, North Carolina	336	+81		
Tinker AFB	Oklahoma City, Oklahoma	+25	1671	See Note 3	
Charleston AFB	Charleston, South Carolina	684	83	No	

Announcement of 17 April 1973 (continued)

Installation Affected	City/State	Personnel			Requested OEA of Assistance	Labor Force	Percentage of Impact Category
		Mil	Affected	Civ			
Shaw AFB	Sumter, South Carolina	259	+13		No		
Laredo AFB	Laredo, Texas	1274	523		Yes*	3.5	Severe
Goodfellow AFB	San Angelo, Texas	283	523		No		
Kelley AFB	San Antonio, Texas	+253	1175		See Note 2		
Hill AFB	Ogden, Utah	+35	542		See Note 5		
Ramey AFB	Aquadilla, Puerto Rico	1355	623		Yes*	14.8	Severe

VI. Announcement of 22 November 1974

Installation Affected	City/State	Mil	Personnel Affected	Requested OEA	Percentage of OEA	Impact Category
		Civ	Assistance	Labor Force		
Kodiak Tracking Station	Kodiak Island, Alaska	121	2	Yes	4.3	Severe
Davis Monthan AFB	Tuscon, Arizona	164	8	No		
Little Rock AFB	Jacksonville, Arkansas	18	32	No		
Boron AFS	Boron, California	76	10	No		
Castle AFB	Merced, California	42	3	No		
Hamilton AFB	Novato, California	100	650	Yes*	2.8	Moderate
Edwards AFB	Rosamond, California	44	41	No		
McClellan AFB	Sacramento, California	818	+173	No		
Patrick AFB	Cocoa Beach, Florida	460	270	No		
Homestead AFB	Homestead, Florida	278	9	No		
Hickam AFB	Honolulu, Hawaii	190	7	No		
Mountain Home AFB	Mountain Home, Idaho	60	3	No		
Richards Gebaur AFB	Kansas City, Missouri	1436	902	See Note 6		
Fallon AFS	Fallon, Nevada	69	8	No		
Pease AFB	Newington, New Hampshire	495	11	No		
Holloman AFB	Alamogordo, New Mexico	36	69	No		
Kirtland AFB	Albuquerque, New Mexico	808	296	No		
Cannon AFB	Clovis, New Mexico	25	3	No		
Griffiss AFB	Rome, New York	36	1119	See Note 7		
Pope AFB	Springlake, North Carolina	25	3	No		
Rickenbacker AFB	Columbus, Ohio	495	5	No		

VI. Announcement of 22 November 1974 (continued)

Installation Affected	City/State	Personnel		Requested OEA	Percentage of Labor Force	Impact Category
		Affected Mil	Civ Assistance			
Wright-Patterson AFB	Fairborn, Ohio	525	+685	No		
Benton AFS	Redrock, Pennsylvania	90	17	Yes*	.01	Negligible
Aiken AFS	Aiken, South Carolina	73	7	No		
Bergstrom AFB	Austin, Texas	580	+675	No		
Ellington AFB	Houston, Texas	575	1175	See Note 8*		
McGregor AFS	Port O'Connor, Texas	186	12	See Note 1*		
Hill AFB	Ogden, Utah	64	3	No		
Bedford AFS	Bedford, Virginia	70	11	No		
Othello AFS	Othello, Washington	113	29	See Note 9*		
Fairchild AFB	Spokane, Washington	349	+243	No		
Osceola AFS	Osceola, Wisconsin	95	27	See Note 9*		

APPENDIX B
STANDARD QUESTIONNAIRE FOR EACH
OEA CASE STUDIED

1. Does the affected community meet the criteria to be included in the research?
 - a. Was the reduction announced during the period 1969 to 1975?
 - b. Did the affected installation belong to the Air Force?
 - c. Did the affected community request OEA assistance?
 - d. Did the percentage of civilian jobs lost due to the closure or realignment exceed one percent of the associated SMSA work force (county population where appropriate)?
2. What were the assets intrinsic to the area surrounding an affected installation that were identified by the community as possible means to offset the adverse impact?
 - a. Which assets so identified by the community were selected for exploitation in the recovery effort?
 - b. What obstacles, if any, arose to hinder the success of the community plan to develop those assets chosen for exploitation?
3. What role did state or regional government play in the recovery effort?
 - a. Was state government assistance or explicit concurrence necessary for the local community to implement recovery plans?
 - b. Did existing state statutes facilitate or hinder the community's recovery effort?

- c. Did the community experience a delay in the implementation of its recovery plan while awaiting the enactment of specific enabling legislation by the state government?
- d. Did the state provide funds to assist in the recovery effort?

4. What was the recovery strategy adopted and implemented by the community itself?

- a. Was some form of umbrella committee or take over entity established?
- b. What efforts were made by the community to attract new industry to utilize former base facilities?
- c. Did the community develop a data base of pertinent information regarding the potential re-uses of the former installation's land and facilities for distribution to industry sources and publications? If so, what information was included in this data base?
- d. Were efforts made by the community to eliminate social deficits in order to establish an atmosphere favorable for attracting new industry? For example, did the community strive to ensure that educational and recreational facilities were of sufficient quality that industry executives would favorably consider locating the families of its workers there?
- e. Did the community seek to support or implement the identification of classes of new industries that complement existing industry or agriculture and should be attracted to the community?

f. Did the community seek an interim use agreement from the federal government that would permit the use of the base property before the conveyance of title took place?

5. In those cases where the closure of the installation is complete at the time of this research: How was the base actually utilized after the military left?

a. Did the community buy the base at fair market value?

b. What consideration was given to use of the property at a discount, (e.g. educational uses, use as a public airport, use for parks or other public recreation)?

c. Did any obstacles exist that specifically prevented use of the former base facilities in such a manner so as to allow the discount noted above, and if so, what were they?

6. How many civilian jobs have been established on and off the installation as a result of the recovery efforts?

APPENDIX C
CASE STUDY ANALYSIS

QUESTION 1

Community: Kenai, Alaska

Installation: Wildwood Air Force Station (WAFS)

Closure Announced: September 1971

Effective Closure Date: 1 July 1972

Positions Affected: Elimination of 374 military and 65 civilian jobs

Percentage of Civilian Jobs Lost vs Work Force: 4.8%

Note:

Kenai--Cook Inlet is classified as a persistent unemployment area by the Department of Labor (40; 52:5).

Reported unemployment rate: City of Kenai, 13%

Kenai Peninsula, 20% (51:1)

QUESTION 2

The local community seized the closure of Wildwood AFS as an opportunity to help alleviate the recognized high unemployment rate already in existence. Conversion actions focused on vocational-technical training, commercial and industrial job generation, public airport development, public housing, recreation, and public utility service expansion.

QUESTION 3

No specific mention of state government role other than coordinative function with area leadership (51:5).

QUESTION 4

An interesting feature of the Kenai/Wildwood recovery program is the local acquisition of the property through the Alaska Native Claims Settlement Act of December 18, 1971 instead of the usual disposal procedures specified in the Federal Property and Administrative Services Act of 1949 (52:5). Consequently, the recovery actions of the OEA were closely coordinated with the Department of the Interior (DOI) and the Bureau of Indian Affairs (BIA). The BIA obtained the use of Wildwood AFS under permit from the USAF through 30 June 1973, which was the programmed life of the Air Force caretaker unit at the station (52:5). The Kenai Native Association acted as the receiving/management entity for the property and began programs to attract varied programs to re-use the station. For example, station property is being used for boarding students attending Kenai Borough Schools, facilities are being subleased to the State Education Department for public school orientation, and the State Police have begun a training program at the station. "An aged and low-income housing program was started in 1973 using the station multi-plex permanent housing and . . . 48 trailer units [52:6]."

QUESTION 5

In mid-August 1972, the USAF granted a right-of-entry to BIA, pending issuance of a permit. In July 1973 the BIA became custodian of the facility under federal public domain laws. On 28 March 1974 this property was officially transferred by the Department of the Interior to the Kenai Native Association under Public Law 92203, the Alaska Native Claims Settlement Act. The boarding school program eliminated any Defense impact on the area public schools by replacing dependent students with native students (52:6). A breakdown of end use by class of re-use is as follows (26:50):

- a. Industry
- b. Education
- c. Agriculture
- d. Municipal

QUESTION 1

Community: Kodiak Island, Alaska

Installation: Cape Chiniak Satellite Tracking Station

(AKA: Kodiak Tracking Station) (KTS)

Closure Announced: 14 March 1975

Effective Closure Date: Unknown

Positions Affected: 121 civilian contractor personnel

2 military (USAF officers)

81 contractor personnel lived off-station

Percentage of Civilian Jobs Lost vs Labor Force: 4.3%

(by late 1975 only a 10 man contractor force remained.)

"Community Area" of Kodiak is made up of the Kodiak Island Borough plus the U.S. Coast Guard base near Kodiak. This area coincides with the 1970 Kodiak Census Division.

Chiniak Village (population approximately 200) is situated just outside the tracking station and is made up primarily of two trailer parks, a general store, and an electrical generating facility. "For all practical purposes [it] is no longer a viable community . . . at least until KTS is converted to civilian use [23:15]."

Community-type services, such as mail delivery, road maintenance, emergency medical help, sanitation and so forth are either no longer available to Chiniak residents or have been drastically reduced.

QUESTION 2

Intrinsic Assets

"The City of Kodiak serves as home port for the largest fishing fleet in Alaska. Fishing and seafood processing form the economic mainstay of the area [23:9]."

"Recreational opportunities are numerous and include salt and freshwater fishing, waterfowl, upland bird, and big-game hunting . . . [23:9]."

Potential use of air strip on tracking station to attract "staging area operations" in support of a large off-shore oil operation scheduled to take place in the Gulf of Alaska (23:17).

Potential exists for large scale timber harvesting (23:17).

QUESTION 3

Although this question deals specifically with the state government's role, it should be noted that

With strong support from the Department of Interior's Bureau of Land Management, the General Services Administration, the Department of Commerce and the U.S. Air Force, arrangements were made within the framework of the Alaskan Native Claims Settlement Act to transfer KTS property to Lesnoi, Inc., a native village corporation affiliated with Koniag, Inc. [23:17].

QUESTION 4

In order to make the real property economically viable, the Air Force was able to arrange the transfer of ownership of a significant amount of installed and personal equipment to the native corporation. These items, consisting of communications equipment, diesel generators, spare parts, tools, expendables, etc., with an acquisition cost of nearly one-half million dollars, are invaluable in assisting early civilian use of KTS. Lesnoi, Inc., acquired control of the excess real and personal property on December 30, 1975 [23:17].

In early January 1976 one of the major Alaskan oil prospectors made formal inquiries of Koniag, Inc. for the possible lease of the facilities . . . that same month. Koniag's president announced that his corporation was indeed 'planning a center to accommodate the activities of the oil industry's search for oil and gas on the outer continental shelf' [23:18].

Furthermore, Lesnoi, Inc. engaged the services of a private consultant firm, Robert R. Nathan Associates, Inc., Anchorage, Alaska to identify potential uses for the surplus federal properties at Cape Chiniak, (KTS). Although uses such as timber, grazing, recreation, tourism, and residential development were considered by the consultant, residential development and some forms of tourism/recreation seem [ed] the most promising [23:18].

QUESTION 5

Final disposal still pending (16).

QUESTION 1

Community: Thomasville, Alabama (Clarke County)

Installation: Thomasville Air Force Station (TAFS)

Closure Announced: 29 October 1969

Effective Closure Date: January 1970

Land Area Declared Surplus: Unknown

Positions Affected: Elimination of 110 military and 18 civilian jobs

Percentage of Civilian Jobs Lost vs Work Force: 0.3%

Percentage of Military and Civilian Jobs Lost vs Work Force: 2.3%

QUESTION 2

The community of Thomasville attempted to use the surplus facilities at the Station as an elementary school. Their existing school system, with 1,617 students was considerably overcrowded, so much so that two private homes were used to provide needed space. The community's plan was to acquire only certain facilities adequate for the purpose, with the remainder to be sold by GSA at fair market value for industrial use.

The City Council of Thomasville met on 18 May 1970 and voted against acquiring the Station property for educational uses because maintenance funds were not available (37).

QUESTION 3

A state agency, the Alabama Department of Mental Health submitted an application to the Department of Health, Education and Welfare to acquire the Station for State Mental Health uses (37). DHEW requested GSA to assign the Station to the State agency on 9 September 1970.

QUESTION 4

Due to the approval of the Alabama Department of Mental Health's application for the entire Station, solicitation of new industry was not appropriate.

QUESTION 5

Facility was conveyed under public benefit discount to the State of Alabama for use as a mental health facility (16).

QUESTION 1

Community: Camarillo, California (Ventura County)

Installation: Oxnard Air Force Base (OAFB)

Closure Announced: 29 October 1969

Effective Closure Date: December 1969

Positions Affected: Elimination of 1284 military and 293 civilian jobs

Percentage of Civilian Jobs Lost vs Labor Force: 0.5%

Percentage of Total Military and
Civilian Jobs Lost vs Labor Force: 2.8%

QUESTION 2

The Ventura County area can be divided into four basic economic regions with varying development assets and deficits. Areas which can be described as possessing assets appropriate for economic development include the Ventura-Oxnard-Port Hueneme area along the Pacific coastline which is ". . . the population and industrial center of the county [46:3]," and the Santa Clara Valley which is a ". . . rich agricultural and oil producing area [46:3]." Areas which can be considered an economic deficit include the Los Padres National Forest, which is uninhabited and occupies the northern section of the county, and eastern Ventura County, which includes the communities of Simi Valley, Thousand Oaks, Newbury Park and Camarillo (46:3). These communities are primarily residential, primarily serving

commuters to Los Angeles County. Consequently, ". . . there is virtually no economic base in eastern Ventura County . . . [46:3]."

Mitigating this deficit to some degree, however, was the demonstrated desire of these communities to build an industrial base. As an example, the City Council of Simi Valley was increasing the area of land zoned for industrial purposes in order to help create jobs and diversify the economy (46:4).

On an aggregate basis, the County stands to benefit greatly in the tourism/recreation arena due to its proximity to Los Angeles. The Bureau of Outdoor Recreation of the U.S. Department of the Interior has determined that ". . . Los Angeles and San Francisco account for 75% of the market for recreation in California and that Los Angeles is twice as important as San Francisco in this respect [46:8]."¹⁵ Ventura County was found to be sufficient in terms of the availability of public recreation developments but deficient in complementary private facilities to economically benefit from the tourism traffic so generated (46:8).

QUESTION 3

Available information suggests that State control of highway funds by the Department of Transportation has prevented the acceleration of construction projects that would have facilitated the economic recovery effort.

QUESTION 4

Ventura County communities had an active development organization in the Ventura County Economic Development Association. This agency has played an active role in seeking to devise uses for Oxnard AFB (46:18). Notwithstanding their efforts, however, the conflict that existed between the development strategies of the City of Camarillo and Ventura County prevented real recovery progress in the productive application of the base's assets as late as five years after the closure (51:12; 52:32). Ventura County applied for use of the property for general aviation purposes with limitations concerning the size of aircraft permitted to use the facility and hours of operation (51:12). Meanwhile

. . . the City of Camarillo and Pepperdine University submitted parallel and mutually supporting applications to GSA and HEW, respectively, to convert the base to a limited-use, non-commercial airport and a school of transportation and travel. The county and city-university applications are thus in direct competition for the property [46:15].

Available information indicates that interim-use licensing of the property did not take place, and as a result, the unused facilities at the base were beginning to deteriorate for lack of maintenance (26:15).

The goals of the economic recovery strategy for Ventura County were evidently widely accepted. They included increased or improved community service facilities, industrial development,

tourism, and recreation (46:19). The prime hindrance to this strategy was a mutually acceptable re-use for Oxnard AFB property (51:12).

QUESTION 5

Actual re-uses of Oxnard AFB by end use class are aviation, education, industry, municipal, parks and recreation, and military reserves (16).

QUESTION 1

Community: Novato, California (Marin County)

Installation: Hamilton Air Force Base (HAFB)

Reduction Announced: 17 April 1973

Closure Announced: 22 November 1974

Effective Closure Date: Not available

Positions Affected: Elimination of 1090 military and 1103 civilian jobs

Percentage of Civilian Jobs Lost vs Work Force: 2.8%.

QUESTION 2

The Novato/Marin County area is a suburban community

that serves as a prime "bedroom" for San Francisco. However, it has been described as possessing a high degree of autonomy and vigor that has resulted in strong local government and effective community planning (54:1). The Marin County area has a requirement for increased educational and recreational facilities due to its suburban character. Unfortunately, obstacles have arisen that have delayed realization of a successful recovery project. "The project has eluded a solution in part by the inability of the entire community--both county and city--to join together toward a common objective [35]."

The City of Novato would like to see the former military base developed for non-aviation uses, while the Marin County government

would like to develop the base as a ". . . limited aviation activity [54:2]."

QUESTION 3

There is no evidence in available OEA data to indicate that specific state enabling legislation was required to facilitate the recovery effort. However, the State of California did establish a "task force" under the Department of Commerce to assist local communities affected by defense reductions throughout the State (52:16).

QUESTION 4

As previously noted, the recovery strategy developed by the community has been embroiled in controversy, but there are some areas of general agreement. These areas of consensus are:

. . . that the former Lonham Act housing project, 37 building on an 18 acre prime site should be improved and used for publicly supported, moderate income housing . . . that about 66 acres should be reserved for public park and recreation use; and that the remaining, non-airfield portions of the base should be subject to reasonable, controlled industrial, commercial, and community development [54:3]."

In June of 1976, the City of Novato reduced its role in the recovery effort to one of an observer rather than an active participant (54:1). Consequently, Marin County has proposed the following re-uses of the Hamilton AFB property (54:4):

- a. Acquire all of the surplus property from GSA for use as a public airport at 100% discount.
- b. Close the existing municipal airport and relocate its functions to the former base.
- c. To limit civil aviation at the base to light, private aircraft and small commuter aircraft. Hours of airport operation would also be limited.
- d. To acquire and develop the non-airport related property to generate industrial, commercial and office park revenues to help support the airport operation.

There is no evidence of interim-use licensing of the property taking place. In fact, deterioration of the facilities and related personal property was taking place due to disuse (54:5-6).

QUESTION 5

One thousand one hundred ninety-seven units of housing were transferred to the U.S. Navy. "[Approximately] 1,056 acres of the surplus property were made available for public airport purposes on 31 March 1976 [54:2]." However, final conveyance of the property has still not taken place (16).

QUESTION 1

Community: Orlando, Florida (Orange County)

Installation: McCoy Air Force Base (MAFB)

Closure Announced: 17 April 1973

Effective Closure Date: 1 July 1974

Positions Affected: Elimination of 2930 military and 472 civilian jobs

Percentage of Civilian Jobs Lost vs Work Force: 0.8%

Percentage of Military and Civilian Jobs Lost vs Work Force: 2.2%

QUESTION 2

Assets appropriate for economic development in the Orlando area are many. While prior to the 1950s the area economy was primarily tied to agriculture and limited tourism the area has recently experienced phenomenal growth. From 1950 to 1960, Orlando's population grew by 124% and ". . . the 60s brought Disney World, growing regional transportation networks and military/aerospace activities . . . [44:5]." Concomitant with this growth the Orlando area has experienced a significant diversification into the service and manufacturing industries, and has acquired an impressive array of educational facilities as well (44:8-15). At the time of McCoy's closure the area operated what has been described as an excellent education system at the university, college, junior college, and

vocational education levels. This availability of educational facilities is seen as an asset because

. . . technologically sophisticated firms prefer locations near universities or major colleges which can provide computers, laboratories, researchers and specialists in a broad range of fields to assist their companies [44:12].

Of further value were the development programs and agencies already in existence at the time of the McCoy AFB closure announcement. The Orlando City government had been operating a portion of McCoy AFB since 1962 as their commercial air terminal. In their master plan for continued development of Orlando Jetport, the city had included the contingency of the closure of the base. This pre-planning afforded significant momentum to the recovery effort (44:24).

Some hindrances to rapid recovery did exist, however, the principal one being that the planning progress of the community was delayed while DOD agencies allocated parcels of the property for future defense needs in the area. These allocations included a withdrawal of a portion of property from the excess package to support a SAC satellite-basing activity (52:43-44).

QUESTION 3

No specific enabling legislation was required from the state. However, close coordination was maintained with the Florida Department of Transportation in an effort to fully integrate Orlando Jetport

with needs of the Central Florida transportation corridor (44:35).

QUESTION 4

The principal thrusts in the Orlando area development strategy have been centered around re-use of the base property for transportation, aviation-related industry, education, and recreation programs. Community leaders quickly formed a coordinative body, the McCoy Impact Study Committee, to manage these programs, and seek interim-use of the base property (52:44). An interim-use license was granted to the Aviation Department of the City of Orlando to operate the excess property for aviation, and aviation-related industry pending final disposal (52:44). Valencia Community College began a technical education program at the former base in order to provide programs not available at the time of the McCoy AFB closure (52:28). The City of Orlando began an active program to attract commercial prospects to the former base and compiled a brochure containing photographs of the more versatile facilities accompanied by utility and usable floorspace information. This brochure was forwarded to priority prospects and made available to all area Chambers of Commerce and development commissions.

QUESTION 5

The city . . . acquired the excess airfield facilities in April 1975, at no cost, for public airport use, and an additional 16 improved acres were conveyed at no cost

for educational purposes. There are now some 40 firms on the former base with an annual payroll in excess of 14 million, and 1,500 students use the educational facilities. Revenues accruing to the jetport are now approximately \$5 million per year and increasing [53:8].

The Department of Defense retained approximately 1,200 acres for use by the Army, Navy and Air Force, including 668 military family units (53:8; 52:43). By end-use class, 2,537 acres of surplus property were acquired by the City for industrial, commercial, airport, education and recreation uses.

QUESTION 1

Community: Columbus, Indiana (Bartholomew County)

Installation: Bakalar Air Force Base (BAFB)

Closure Announced: 29 October 1969

Effective Closure Date: April 1970

Positions Affected: Reduction of 23 military and 318 civilian personnel

Percentage of Civilian Jobs Lost vs Work Force: 1.3%

QUESTION 2

The city chose to further develop Bakalar AFB as a civil airport.

Prior to the closure the community had a joint-use lease with the Air Force for civil airport purposes and had expended over \$200,000 for improvements to the leased property (37). Unfortunately the community did not fully coordinate its plans to use the base as a public airport with GSA and FAA in that its initial application for the property was submitted for approval before disposition of the existing Walasboro Public Airport was resolved (37).

QUESTION 3

No state agency involvement is indicated in available information.

QUESTION 4

The community chose to apply for all the surplus property for airport use. The Federal agencies involved (GSA and FAA) " . . . contend[ed] that this cannot be justified and that portions of the property [could] only be conveyed for non-airport purposes [38]."

The community maintained this position as of March 1971.

"To enable continued civil aviation use of Bakalar and the city to support custody and care pending final disposition, the joint-use lease was amended to include all the base property [39]."

QUESTION 5

Facility was conveyed for aviation, commercial, and educational end uses (36).

QUESTION 1

Community: Topeka, Kansas (Shawnee County)

Installation: Forbes Air Force Base (FAFB)

Closure Announced: 17 April 1973

Effective Closure Date: September 1973

Positions Affected: Net reduction of 1,241 military and 83 civilian

Percentage of Civilian Jobs Lost vs Work Force: 0.1%

Percentage of Military and Civilian Jobs Lost vs Work Force: 2.5%

QUESTION 2

Assets identified as intrinsic to the Shawnee County area and worthy of exploitation are as follows (47:7, 55):

- a. Topeka's central location within the continental United States and resulting proximity to major rail and interstate transportation routes.
- b. An existing institutional structure particularly strong in the areas of medicine and education.
- c. Readily available recreational and cultural facilities.
- d. Location in an area of prosperous and fertile agriculture.
- e. "The availability of land, housing, and manpower training capabilities to accommodate new development [47:55]."

Early in the recovery effort, the lack of a long-range plan for area economic and industrial development was seen as the

principal obstacle to the exploitation of the assets noted above. At the time of the closure announcement there was ". . . no organization responsible for guiding Topeka's long-range economic and industrial program [47:56]." Consequently, Topeka has demonstrated a lack of sophistication in attracting industry in the past, and existing organizations such as the Metropolitan Topeka Airport Authority and the Chamber of Commerce operate independent development plans (47:4, 55).

QUESTION 3

There is no evidence of specific state enabling legislation being required to facilitate the recovery effort, most likely because the base property is located within the corporate limits of Topeka (47:31).

QUESTION 4

The initial recovery strategy for Topeka centered around getting organized for the coming effort. Community leaders formed the Topeka Steering Committee for providing overall guidance for the recovery program (52:58-59). The Steering Committee also placed heavy emphasis on making the Industrial Development Corporation, an existing but ineffectual planning body, operational in order to provide long-range planning objectives (47:24-25). The re-use plan

implemented by the community consists of the transfer of the existing commercial aviation activity to the base which therefore accommodates the development of recreation, health, housing, industrial development, and public uses (52:58).

The State is establishing a consolidated health laboratory facility in the base hospital and is planning to build a printing plant and records management center on acreage contiguous to the hospital. Vo-tech training programs are established in the former USAF Skill Center and Dental Clinic. A National Fireman's Academy will be established on the base . . . the State Police [have programmed the] move of their training center from Salina, Kansas to Forbes . . . [52:58].

The 1,000 units of family housing were slated for private use. Interim-use licenses were obtained for these programmed uses and the City of Topeka began to operate the housing under a Protection and Maintenance Agreement in December 1973 (52:58).

QUESTION 5

Recovery efforts in Topeka resulted in the following end uses of the Forbes AFB property (52:50):

- a. Industry
- b. Commercial (services, etc.)
- c. Airport
- d. Education
- e. Health
- f. Housing
- g. Recreation
- h. Municipal (government offices)

QUESTION 1

Community: Chicopee and Ludlow, Massachusetts (Hampton County)

Installation: Westover Air Force Base (WAFB)

Closure Announced: 17 April 1973

Effective Closure Date: 1 July 1974

Positions Affected: Elimination of 4014 military and 492 civilian jobs (56:71)

Percentage of Civilian Jobs Lost vs Work Force: 0.3%

Percentage of Military and Civilian Jobs Lost vs Work Force: 2.5%

QUESTION 2

The assets intrinsic to the Hampton County/Springfield SMSA area that are suitable for economic development are many.

Perhaps no area in the United States of comparable geographic size or population has so many schools of high quality. Five of the sixteen major schools in the Greater Springfield area and surrounding communities have national reputations [42:21].

The area is not only a location of considerable industrial attraction, but has historical aspects that are attractive to the tourist as well.

"Sophisticated highway systems, excellent air, rail, and bus service bring approximately one-half million tourists into the area annually [42:30]." A summary of the area's principal assets is as follows (42:41):

- a. Access to east-west and north-south interstate routes.
- b. Overnight truckload delivery to 50.5 million people with 28% of the U.S. income.
- c. Complete transportation service.
- d. A skilled labor force.
- e. Diversified industries.
- f. Good labor-management relations.
- g. Revenue bonding for new industrial construction.
- h. Strong area Chamber of Commerce and Area Development Corporation.
- i. Excellent educational opportunities, technical and academic.
- j. Proximity to recreational areas and urban cultural amenities.
- k. Strong urban redevelopment program.

Notwithstanding the availability of these assets, the re-use of the Westover property has been hindered by the nature of the DOD realignment action. The airfield and airfield-related land and facilities were retained by DOD for use by the U.S. Air Force Reserves. This action resulted in the excessing of the outlying areas of the base, with portions coming within the purview of the City of Chicopee and other portions falling within the town of Ludlow. This situation

. . . has necessitated time-consuming adjustments in the boundaries between excess and retained areas in order to accommodate proposed civilian uses and has also

caused difficulties in arriving at an equitable apportionment of utility system costs between civilian and military users [53:10].

It has been the primary hindrance to rapid conversion of base facilities to productive civilian use (53:10).

QUESTION 3

The Massachusetts State government has played an active role in assisting the recovery efforts of communities impacted by defense reductions. Shortly after the defense realignments of April 1973 were announced the State created the Joint Commission on Federal Base Conversion, which has since played a key role in coordinating State and local programs (53:24).

The Commission prompted State legislation creating a Base Conversion Land Bank to finance, acquire and market surplus DOD properties; and the Westover Metropolitan Development Corporation to acquire and develop surplus lands at Westover Air Force Base in Chicopee-Ludlow [53:24].

QUESTION 4

As previously noted, the local strategy involved the creation of a coordinating development/take-over entity, the Westover Metropolitan Development Corporation (WMDC), to manage the base conversion effort. Their recovery effort is focused on the re-use of the surplus base property for industrial, education, commercial, park

and recreation purposes. WMDC has acquired interim-use licenses for portions of the property and has industrial tenants in place (53:10). One of these tenants is committed to the construction of a 50 million dollar power plant when conveyance of the property to WMDC is accomplished.

QUESTION 5

Final conveyance is still pending.

QUESTION 1

Community: Wadena, Minnesota (Wadena County)

Installation: Wadena Air Force Station (WAFS)

Closure Announced: 6 March 1970

Effective Closure Date: October 1970

Positions Affected: Elimination of 175 military and 15 civilian positions

Percentage of Civilian Jobs Lost vs Work Force: 0.7%

Percentage of Military and Civilian Jobs Lost vs Work Force: 5.6%

QUESTION 2

Initially the availability of the station property for civilian re-use was seen by the community as an opportunity to meet a vocational education requirement in the area. However, estimated costs of civilian conversion and follow-on operation were found to be too expensive for strictly local resources. Therefore, a broader base, regional application had to be developed. A regional use that could meet this requirement would be a rehabilitation center for alcoholics and drug addicts programmed to serve a seven county area. Some problems that had to be overcome, however, were the favorable location of such a facility by the State of Minnesota so that the station property could be used, and the fact that the community was experiencing difficulty meeting Health, Education and Welfare (HEW) funding requirements (37; 40).

QUESTION 3

The State Health Department supported the use of the Station for use as a Rehabilitation Center and assisted the seven-county action group in the preparation of the formal re-use proposal to GSA.

QUESTION 4

The recovery and re-use strategy adopted by the community was to obtain the station property for use as an area-wide Extended Rehabilitation Center for Inebriates. Under the plan, ownership of the station facilities was to be transferred to Wadena County and 24 of the 27 family housing units were to be turned over to the Wadena Housing Authority for use as low-income housing. The community also sought to further improve social services for all of Wadena by seizing the opportunity to elicit OEA assistance in obtaining Federal funds for a new hospital already under construction (as of 31 January 1973) (51:48).

QUESTION 5

The communities' recovery plan was approved and the "transfer of the Station property, including 27 houses, to Wadena County was made on 16 January 1973 [52:80]." OEA was also successful in accelerating the approval of \$1.9 million of Hill-Burton funds for the new hospital in Wadena. These funds are related to the

re-use of the station property since a portion of the present hospital was programmed for use as a detoxification center in support of the new rehabilitation center (52:80).

QUESTION 1

Community: Lewistown, Montana (Fergus County)

Installation: Lewistown Air Force Station (LAFS)

Closure Announced: March 1971

Effective Closure Date: June 1971

Positions Affected: Elimination of 108 military and 27 civilian jobs

Percentage of Civilian Jobs Lost vs Work Force: 1.5%

Lewistown serves as the trading center for a five-county agricultural and ranching area that has a total work force of 11,800 people (26:20).

QUESTION 2

As late as March 1972, no serious community interest had developed concerning the re-use of the Air Force Station. Industrial use of the property was thought to be impractical due to the site's 15 mile distance from town, and initial efforts were centered around use of the facility for a privately operated education center for retarded youths. Negotiations for purchase of this property from GSA for educational uses were completed on 19 September 1972, but GSA rejected the community's offer and insisted on a selling price more consistent with industrial usage of the property (52:52).

QUESTION 3

State role not evident in available data.

QUESTION 4

When community interest in re-using the Air Force Station arose, their first action was to request GSA to delay its scheduled dismantling of the Station facilities. The community then sought and received, a technical assistance grant to aid in the preparation of an industrial development guide for use by community and county officials to help attract industry (26:20).

In order to facilitate the attraction of new industry, the community strove to improve ". . . area health and hospital care facilities [26:20]," with the support of Department of Health, Education and Welfare funds. This assistance provided \$2,465,000 for the construction of a new hospital. After nearly two years a private educational organization, the Montana Institute for the Bible assisted the community in the purchase of the Station from GSA, and fully occupied the property.

QUESTION 5

The station is used as the campus for the Institute, with 220 students. The 27 family housing units are being used for staff and student housing (26:21). It is interesting to note that

The Institute's development provided impetus for other local civic improvements. These improvements, in turn made the area more appealing to new business. As the circle of recovery continues to expand, Lewistown continues to benefit from the experience gained by the closure and conversion of the Air Force Station [26:21].

QUESTION 1

Community: Newburgh, New York (Orange County)

Installation: Stewart Air Force Base (SAFB)

Closure Announced: 29 October 1969

Effective Closure Date: Not available

Positions Affected: Elimination of 2464 military and 1011 civilian jobs

Percentage of Civilian Jobs Lost vs Work Force: 2.1%

QUESTION 2

Newburgh is the center of population and commerce in Orange County, and is part of the New York City metropolitan area. However, Orange County contains some pockets of extreme poverty and the mean family income is lower than the average of all New York State and all of New Jersey (33:1). The principal cause for this poverty is ". . . the excessive concentration of manufacturing industries which employ low wage labor, mostly female [33:2]."

QUESTION 3

Available information suggests that approval from the State Department of Education was necessary to establish a vocational-technical school at the former base (33:46).

QUESTION 4

The development strategy for the Newburgh area principally called for the creation of an active recovery-management body to supplant the passive commissions and study groups already in existence (33:52-53). This new agency would be tasked with employing promotional methods to attract industries to Orange County that would change its economic mix and improve area income, and with developing the available land at Stewart AFB.

OEA recommended that both objectives be achieved through the successful attraction of national firms to the former base that have a need for or would be disposed to use air cargo to distribute their products (33:52). Studies have shown that such firms have a high value-to-weight ratio product and employ highly skilled, well paid workers (34:11-15).

QUESTION 5

Assistance was provided the U.S. Department of agriculture in securing a site at the former Stewart AFB . . . for relocation of the Animal Import Center from Clifton, New Jersey [53:6].

Details of property conveyance not available.

QUESTION 1

Community: Wilmington, Ohio (Clinton County)

Installation: Clinton County Air Force Base (CCAFB)

Closure Announced: 3 March 1971

Official Closure Date: 30 June 1971; Extended to 3 September 1971

Positions Affected: Elimination/Relocation of 1888 Air Force Reservists, 166 Air National Guard full time personnel, 746 Air National Guardsmen and 550 civilians

Percentage of Civilian Jobs Lost vs Work Force: 8.6%

QUESTION 2

The primarily rural area surrounding the closed Air Force Base coupled with existing economic problems brought on by corn-blight and hog cholera at the time of closure led the community to strive to broaden its economic base by attracting new industry and service firms. In order to support the increased interest in industry, the community further sought to attract new educational institutions to the Base.

QUESTION 3

No firm information regarding the state role. May have been involved in the formation of the Community Improvement Corporation (CIC), the transfer/development entity for the City of Wilmington.

QUESTION 4

In the area of Industry and Services, the EAC provided technical guidance to area officials concerning how the base property might best be used, and an Economic Development Administration grant made a private consultant study on the then-proposed industrial utilization of the Base possible. The community has attracted over ten industrial firms to the base, including such major firms as Overseas National Airways and Ferno-Washington, Inc. a manufacturer of hospital equipment. These two firms together provide 428 jobs (26:47; 52:92). In Education, the Laurel Oaks campus of the Great Oaks Vocational School District is located at CCAFB. The School serves a 12 county area, employs a staff of 67 personnel and has a day enrollment of over 800 (27:46). The vocational school also provides adult education services. In April 1974 the Ohio Board of Regents approved the establishment of a Technical College to be located at CCAFB. The institution, Southern State College had an initial enrollment of 250 students and is projected to have an enrollment of approximately 700 students by 1980 (26:47; 52:93). The overall recovery strategy of the Wilmington community resulted in significant reductions of deficits in human resources and the successful attraction of new service and industrial firms.

The Base conversion process was greatly aided through the provision of licenses by the U.S. Air Force that enabled

educational and county leaders to gain entry to CCAFB and to conduct needed planning and development actions [51:62].

QUESTION 5

The property was conveyed by GSA to the city of Wilmington (Community Improvement Corporation--CIC) in November 1973. Since then GSA has released several parcels of land for sale (thru the CIC) to private industry [52:93].

QUESTION 1

Community: Burns Flat, Oklahoma (Four Counties: Washita, Beckham, Custer and Kiowa)

Installation: Clinton-Sherman Air Force Base (CSAFB)

Closure Announced: December 1965; effective date accelerated by 29 October 1969 announcement

Effective Date: Original date: July 1970
Accelerated to: 1 January 1970

Positions Affected: Elimination of 2713 military and 391 civilian jobs

Percentate of Civilian Jobs Lost vs Work Force: 8.4%

Clinton-Sherman AFB is included in the population of this research because in the words of the OEA ". . . the acceleration of the closure to 1 January 1970 caused violent reaction in the area and at the State and Congressional levels [37]." Furthermore, available information indicates that Community/OEA actions for the period 1966 through January 1970 were centered on community development rather than base re-use, since civilian re-use of base facilities were incompatible with the active SAC mission that remained at Clinton-Sherman for most of that time period (37).

QUESTION 2

At the time of the closure announcement, the area's principal industries were agricultural in nature, and the community therefore chose to broaden its economic base to other forms of industry through

the use of property at the former base. Other intrinsic characteristics of this area which supported this plan was the communities' central location within the continental United States which permitted support of markets in both the East and West, and proximity to a variety of surface transportation modes as well as the base's airfield (26:12).

The primary hindrance to early development of these assets was the long period between announcement and closure since the presence of an active SAC mission conflicted with early re-use of the property (51:64). Interim-use permits for the base property were not issued to local authorities until after January 1970 (52:94), four years after the initial closure announcement.

QUESTION 3

State enabling legislature was required to create a management/takeover entity with the authority to represent the four county area involved. "During the 1968-1969 period, the Mid Western Oklahoma Development Authority (MODA) and the Western Oklahoma Area Vocational Technical School (WOAVTS) were organized . . . [52:94]." MODA was granted the authority to issue revenue bonds in order to help support productive re-use of the base (26:12).

QUESTION 4

The recovery strategy implemented by the community with the technical guidance of the OEA centered around re-use of the

installation to attract industry and thereby broaden the area's economic base. The community created overall management authorities to coordinate with Federal agencies and develop the base property. A re-use study funded by EDA recommended the establishment of an industrial air park (26:12) and a vocational training school to supply skilled labor (26:12). This recommendation followed OEA's comprehensive development strategy which in the case of Clinton Sherman was ". . . an all-or-nothing situation [37]." The approach taken was that

Industry cannot be attracted without the labor force generated by the school; the school cannot operate without industry to absorb its graduates; and neither appears feasible without continued operation of the airfield and flight line activities [37].

An interim-use permit was granted to MODA in the Spring of 1970 (56:94) and five major employers were established on the base prior to conveyance (37:13). An interim-use permit was granted to WCAVTS but was not necessary (52:95).

OEA assisted MODA in obtaining financial support from the Small Business Association in order to help attract manufacturing concerns (22:12). The Department of Health, Education and Welfare assisted in the establishment of the Western Oklahoma Vo-Tech Education Center at the former base. The military family housing was programmed to be purchased by MODA from GSA for 1.6 million for use as private homes (26:12; 52:95).

QUESTION 5

GSA, FAA, and DHEW completed disposal of the base real and personal property in July 1971. As of 31 January 1976 the housing had not been sold to MODA, but was maintained by the authority . . . under a contractual agreement with the Air Force [26:13].

Sixty housing units were reserved for use by USAF personnel who accompanied the return of a SAC Satellite Basing Unit to Clinton-Sherman in 1973 (52:95) and 45% of the 900 units are in private use (26:13). "The Western Oklahoma Vocational-Technical Education Center on the former base united 15 area schools into a single educational facility [26:13]." End uses of the former base by land area in acres are as follows (26:13):

Aviation	1,377
Education	105
Housing	73
Industry	924
Recreation	301.

QUESTION 1

Community: Corvallis, Oregon (Benton County)

Installation: Adair Air Force Station (AAFS)

Closure Announced: 24 April 1969

Official Closure Date: 30 September 1969

Positions Affected: Elimination of 749 military and 180 civilian jobs

Percentage of Civilian Jobs Lost vs Work Force: 2.0%

QUESTION 2

The Corvallis and Benton County community had in the past been ". . . strongly education oriented . . . [37]," and as such determined that the availability of the facilities of Adair AFS presented an opportunity to attract industries and thereby obtain an addition to their tax base. However, a hindrance to this approach was found to lie in the strong community sentiment to avoid polluting industries that would have an adverse affect on the existing environment (37).

QUESTION 3

The State was involved in the formal organization of a State-county and city committee to coordinate with OEA on the adjustment effort (37).

QUESTION 4

For a short period of time it appeared that the U.S. Navy Weather Service might relocate to Adair AFS and re-use planning was delayed until December 1969 when the Navy rejected the idea (37).

At that time

. . . development of the station property for education and/or acceptable research or industrial activities, plus development of off-base sites for acceptable types of industry, became the indicated development strategy [37].

During an OEA visit to Corvallis on 16-17 February 1970 representatives of the U.S. International University proposed the establishment of a branch campus of the University at the Station.

QUESTION 5

Late in July [1970] the Station was declared surplus to Federal Government needs except for the SAGE [Semi-Automatic Ground Environment] Building which will be retained by the Public Buildings Service for Civil Defense. The surplus property, except for the Capehart housing, was conveyed to the U.S. International University early in 1971. GSA has agreed to consider a negotiated sale of the housing to the University [38].

QUESTION 1

Community: Burns, Oregon (Harney County)

Installation: Burns Air Force Station

Closure Announced: 6 March 1970

Official Closure Date: October 1970

Positions Affected: Eliminated 104 military and 23 civilian jobs

Percentage of Civilian Jobs Lost vs Work Force: 1.6%

QUESTION 2

Available literature describes the area surrounding Burns AFS as rural, sparsely populated, and economically weak (56:101). The station is remotely located and as a result the local leaders were inclined to stall affirmative adjustment actions and adopt a "wait and see" approach. The community preferred to rely on the possibility that the property at the station might have been used by another Federal government agency, thus solving their problem (37). Federal re-use did not become a reality, however, and as late as December of 1971 no follow-on use of the station had been programmed and it appeared that the land would be disposed by public sale (40).

QUESTION 3

Due to the lack of local interest OEA requested that the Governor of Oregon use a state task force to search for a beneficial

use of the Station property. Ultimately, the State Board of Education, in coordination with the Burns School District developed a plan to use the Station facilities to support a career education program. This proposed use would be part of the SIXCO education program, representing a ". . . major cooperative effort by the State Board of Education, three county colleges in eastern Oregon, and the Boards of Education of . . . six counties [51:73]."

QUESTION 4

The community's recovery strategy, then, was to utilize the station facilities for the career education program.

These facilities located five miles southwest of Burns would relieve an existing overcrowded situation at the Burns-Hines schools and would permit a substantial expansion of vocational [sic] programs for the entire area. Existing barracks and single family houses would provide living quarters for resident students and for the proposed family care components of this program [51:73].

A use permit for the Station facilities was issued to the School District to allow the program to get underway while conveyance proceedings take place (51:73).

QUESTION 5

As of 30 April 1974 adequate Federal funding had not been found due to difficulties in formulating a three year plan that met eligibility requirements of HEW, DOL, DOI, or OED. However, action was

noted as completed as of November 1975 (53:5). Breakdown of end use by re-use class is as follows (26:50):

- a. Education
- b. Agriculture.

QUESTION 1

Community: Aguadilla, Puerto Rico

Installation: Ramey Air Force Base (RAFB)

Closure Announced: 17 April 1973

Effective Closure Date: July 1973. Closure announcement was a follow-on to a realignment announcement made in March 1971 that transferred a SAC mission to other locations and ". . . required that an offer of joint use of the Base by the Air Force and the Commonwealth be made by July 1971 [51:80]."

Positions Affected: Elimination of 1355 military and 623 civilian jobs

Percentage of Civilian Jobs Lost vs Work Force: 14.8%

QUESTION 2

The principal asset in the area surrounding Aguadilla slated for exploitation in the recovery effort was the transportation hub provided in the March 1971 announcement. That realignment decision contained provisions for opening Ramey AFB to commercial aviation through a joint use agreement between the Air Force and the Commonwealth of Puerto Rico (52:108). Further plans called for the expansion of the area's furniture industry and attraction of medium to high technology industry was considered necessary since use of air cargo in the commercial sector is generally restricted to high value-to-weight ratio products (52:108; 33:20). The community also sought to

develop and expand tourist and recreational facilities in the area, taking advantage of the area's semi-tropical climate (51:80).

Implementation of these recovery actions was initially delayed by the failure of the Air Force and the Commonwealth Ports Authority to agree on the terms of the Joint Use Agreement called for in the March 1971 announcement until 4 November 1972 (51:80-81).

This [delay] meant that the Ports Authority lacked both the acreage and tenure to support the substantial investment required for development of the portion of the Base [initially] available for civilian use [51:81].

QUESTION 3

The Commonwealth government, while roughly analogous to a state government in the case of Puerto Rico, appears to have had a more direct role in the acquisition of licenses and, after the closure announcement, title to property at the base. As noted above, the Commonwealth government was the licensee in the November 1972 agreement. Then, in March of 1974 all excess property at the base (3,328 acres) was licensed to the Puerto Rico Industrial Development Company, which is a transfer entity operating in behalf of the Commonwealth government (52:110; 24:2).

Some delays have been ascribed to ". . . the Commonwealth Government's reluctance . . . to make a policy decision designating Ramey as the focal point for development of the island's second international airport [24:9]."

QUESTION 4

The Aguadilla Community and the Commonwealth Government have pursued the development of the Ramey AFB property for aviation, educational, industrial, and recreational applications. The aviation development was considered desirable to support the industrial (air cargo) and recreational (tourism) development programs. The Commonwealth has been active in supporting these development programs by successfully attracting several mainland based manufacturing properties to the area and establishing major tourism programs to bring visitors to the Aguadilla area (24:3). The community's educational emphasis has been in the vocational-technical area to give the abundance of academically trained high school graduates of the area a marketable skill and reduce unemployment (48:8).

QUESTION 5

Available information indicates that while final conveyance of the property has not taken place, the fact that the problems concerning the use of a portion of Ramey AFB as a public airport have been largely resolved has cleared the way for consideration of the applications for the other uses of the property (24:7).

Current Occupants of the Property (as of January 1976) (24:7):

<u>Use</u>	<u>Employment</u>	<u>Acreage</u>
a. Education	166	138
b. Commonwealth Government (Includes Airport)	541	1158
c. Industrial & Commercial	93	*
d. Tourism & Recreation	33	1031

*Included in airport acreage.

QUESTION 1

Community: Smyrna, Tennessee (Rutherford County)

Installation: Sewart Air Force Base (SAFB)

Closure Announced: 8 December 1965. Acceleration of closure date announced 29 October 1969

Effective Closure Date: April 1970

Land Area to Be Surplused: 2,733 acres

Positions Affected: Elimination of 6033 military and 470 civilian jobs

Percentage of Civilian Jobs Lost vs Labor Force: 3.6%

Impact of Base on Local Economy: Aside from the nearly 3.6% impact the base had on the county's work force, the base provided the largest single payroll in the entire Nashville area--24 million. The base further expended \$6 million in the area for food, petroleum, and other purchased services and entitled the local school districts to \$500,000 annual in federal impact aid (26:40).

QUESTION 2

The community chose to capitalize on its location between the industrial centers of Nashville and Mulfreesboro to support reuse of the federal facilities as a transportation hub, further industrial expansion, and recreation purposes. In order to provide skilled labor for the increased insutry, Rutherford County applied for a portion of the property for vocational-technical education (37).

There is evidence of coordination problems regarding the end use of the property among the officials of Smyrna, Nashville, Murfreesboro and Rutherford County (26:41; 37).

QUESTION 3

This closure action had perhaps one of the most pervasive state government involvement. At an October 1968 meeting with representatives of OEA, the Governor's office indicated that the State would coordinate the conversion effort. The State appointed a Sewart AFB Redevelopment Committee and hired a Washington, D.C. based consulting firm to study the re-use problem. The consultant firm " . . . recommended civil aviation use under a regional airport authority, as the major activity at the base [37]." Conflicts existed between the private report and the report of the Sewart AFB Redevelopment Committee (37) and a conflict also developed between the Metropolitan Government of Nashville and Rutherford county, " . . . during which both governments submitted competing application to GSA for the Base property . . . [37]." However, through the coordination efforts of the State and OEA an agreement was reached during March of 1970 concerning the division of the property among airport, industrial and vocational uses (37). It is important to note that

. . . it was the governor's office that was able to bring together the elected officials of Smyrna, Nashville, Murfreesboro and Rutherford County into a body that could

work in concert to get the reconversion task underway. This cooperative effort made possible the acquisition of airport facilities far superior to any that a single city could envision for itself in the foreseeable future [26:41].

QUESTION 4

The recovery strategy adopted by the community exploited the location of Sewart AFB to be used as a transportation hub to both support and attract new industry to fill the economic void left by the departed defense plant. In order to help develop the human resources necessary to support the desired attraction of new industry, a portion of the Base facilities were requested for vocational education purposes. With the assistance of OEA, the community was successful in obtaining an interim use agreement for the base in order to facilitate industrial development. However, in this case early right-of-entry was not in fact required for industrial development (37).

QUESTION 5

The General Services Administration transferred the airfield and airfield-related facilities to the Metropolitan Airport Authority for use as a regional airport under public benefit discount (26:40). Another parcel of land and facilities was conveyed to the State of Tennessee for vocational education use. "Rutherford County and the city of Smyrna established an Airport Development Board to acquire and manage former base property for industrial development and

housing purposes [21:90]." The General Services Administration then sold 450 acres of industrial land and all of the base housing (667 units) to the local community for \$2 million (26:40). End use by acreage is as follows (26:41):

Aviation	1,485
Government Use	626
Industry	450
Housing	150
Military	82
Education	22

QUESTION 1

Community: Sherman-Dennison, Texas (Grayson County)

Installation: Perrin Air Force Base (PAFB)

Closure Announced: 3 March 1971

Effective Closure Date: 30 June 1971

Positions Affected: Elimination of 1450 military and 600 civilian jobs

Percentage of Civilian Jobs vs Work Force: 3.1%

QUESTION 2

At the time of the base closure announcement, the Grayson County area was experiencing a gradual shift towards the industrialization of its then largely agricultural economy. Retail and wholesale distribution services are also an important part of the area economy that helped support a general growth trend prior to the closure action (26:36; 49:2). However

. . . the base closure . . . produced a significant impact on both the local economy and the housing market and . . . the area's previous growth trend was definitely revised [49:2].

Consequently the community sought to regain this lost momentum by augmenting existing surface transportation with the addition of civil aviation facilities at the base. To further draw industry to the area, community leaders chose to expand the educational facilities already available in the area and also to continue to operate many of the

recreational facilities at the base (40).

QUESTION 3

In order to provide a vehicle for airport operation, organization of the Grayson County Airport Authority [was] authorized by the Texas Legislature and signed by the Governor [45:6].

This action took place prior to 24 May 1971 (45:6), less than 3 months after the closure announcement.

Additionally, the Texoma Regional Planning Commission was given the authority to act as the exclusive agent for dealing with federal and state agencies on behalf of Sherman, Dennison and the County concerning any turnover of property on Perrin AFB (26:36). Community leaders gave the Commission this authority five days prior to the closure announcement, and as a result, a re-use plan was submitted to GSA "within two weeks after the base closed [26:36]."

QUESTION 4

Sherman-Dennison chose to make maximum use of public benefit discount procedures in their recovery plan. The community moved swiftly to obtain interim-use licenses for aviation, educational and recreational uses. Licensing of the golf course to Grayson County was arranged during the initial OEA visit that took place 13-15 April 1971 (40). Interim-use licenses were issued to Grayson County for civil aviation use and to Grayson County College for vocational-

technical education programs" . . . shortly after the 30 June 1971 closure of the Base [40]." This prompt action was made possible, in part, by the early availability of a re-use plan and made it possible for the community to start realizing the benefits of the base property and equipment almost immediately (26:36).

The military family housing was disposed of by public bid sale (41).

QUESTION 5

Deeds for the property to be used as described above were delivered to the local community within 18 months of the effective closure date (26:36). End use by acreage is as follows (26:37):

Aviation	1,430
Education	311
Health	1
Housing	62

Perhaps the most significant feature of this recovery effort is the demonstrated benefit of early recovery planning.

Early planning made it possible for almost immediate occupancy of the base by civilian industries and services. There was no delay in legal action necessary to assign conversion management responsibility to the Texonna Regional Planning Commission . . . In essence, the benefits of adjustment actions were apparent before the area had a chance to feel any excessively harsh economic effects due to the base closure [26:37].

QUESTION 1

Community: Laredo, Texas (Webb County)

Installation: Laredo Air Force Base (LAFB)

Closure Announced: 17 April 1973

Effective Closure Date: September 1973

Positions Affected: Elimination of 1274 military and 523 civilian jobs

Percentage of Civilian Jobs Lost vs Work Force: 3.5%

QUESTION 2

Intrinsic Assets to Area Surrounding Laredo AFB: Laredo has been considered the "Gateway to Mexico," therefore

- a. it is one of the busiest ports of entry in Texas.
- b. it is a commercial, manufacturing, livestock, and agricultural center.
- c. has a tourist industry.

Due to lack of water, most land is used for cattle ranching.

Recently completed dam, has stabilized flow of Rio Grande-- provides flood control and steady supply of municipal water.

Water using industries would probably require an increased water supply, however the Laredo is terminus of I-35, US 59, US 83.

Presently, traffic must cross over narrow International Bridge--traffic congestion is a major problem for the two Laredos (43:6).

Transportation plus: Missouri-Pacific Railroad and the Texas-Mexican railroads terminate and join with the Mexican National Railroad at Laredo.

Unemployed work force in Laredo is primarily unskilled with little basic education--many speak little English. However, the work force is, at the same time, highly stable, intelligent, and devoted employees, and are also receptive to training. These qualities make the available labor pool attractive to many industrial activities.

These assets (labor, available transportation, tourism) are complemented strongly by the base's available facilities, both in attracting new industry and upgrading "some community services that have long been inadequate [43:18]."

QUESTION 3

Role of the State Government: One state agency has been singled out in the OEA report (43:4). The Texas Industrial Commission (TIC) with the support of the Economic Development Administration prepared a Base Re-use Plan and is assisting the Chamber of Commerce in its industrial solicitation efforts. It is also monitoring three technical studies that will provide needed data:

- a. an analysis of potential industrial sites, including the preparation of detailed design plans for these sites,
- b. a study of tourism resources and tourism promotion, and

c. the preparation of a transportation plan to integrate roads on base into the municipal street system.

The state of Texas has granted the City of Laredo \$10,000 for marketing. (OEA felt 40,000/yr was more realistic for this purpose (43:29)).

In June 1974, the EDA gave the Laredo Chamber of Commerce a grant for \$23,875 and the Chamber of Commerce provided \$8,125 of its own to complete the funding for a business and job development program for Laredo and Webb County.

OEA recommended that the community ask the Texas Legislature to pass legislation enabling local governments to purchase, hold, manage, and sell property and to request the GSA to delay disposal action, select parcels of land until necessary enabling legislation is enacted (43:70).

QUESTION 4

The Laredo community identified six "areas of concern [43:23]."

- a. Industrial and Commercial Development
- b. Tourism and Recreation Development
- c. Resolving Transportation and Traffic Problems
- d. Human Resources Development
- e. Public Facilities and Services
- f. Housing Development

Laredo focuses more on industrial development than commercial development. The program placed emphasis on the

following items (45:24):

1. Identification and use of industrial land and industrial type buildings.
2. Developing industrial prospects.
3. Selling prospects on Laredo's values.
4. Expanding male employment.
5. Upgrading vocational-technical training and education.
6. Preserving the environment.
7. Assisting small business firms.
8. Continuing aid to local industry.
9. Evaluating need for a food produce distribution center.
10. Promoting international trade.

Item 1 is keyed to the TIC study on Industrial Sites and Development.

The TIC is also conducting a study to identify a minimum of ten industrial categories, by standard industrial codes that can realistically locate in Laredo. The community also decided not to offer the better locations to low-wage industries, recommended base be developed as an "Airport Industrial Park and, also that Laredo International Airport be moved to the closed base [43:29]." This relocation is intended to take advantage of the recent trend of industrial firms using air cargo and also the attraction of ready access to a firm's location by executive aircraft.

Development Industrial Prospects was hindered in part by

- a. Inadequate Financial Support.

b. Lack of coordinated approach in organizing and carry out development work by the professionals involved in these efforts.

c. Great difficulty in selling an isolated community that is deficient in many public improvements and services.

d. Lack of a comprehensive development strategy that would use effectively the available economic data to develop an action program.

Item 3 pertains to part d of Question 4. Laredo has long been faced with a relatively low investment in public services caused by a high and long-term incidence of poverty, unemployment, and under-employment. A large number of unpaved streets and a lack of storm sewers have been the result of this condition.

The approach taken to overcome this condition is to place emphasis on the quality of Laredo's labor force.

Item 4. Presently almost 90% of the persons employed by Laredo's industrial firms are women, which leads to large unemployment in male labor force.

Item 5. Upgrade Voc-Tech Training--use base facilities to provide educational institutions as required.

Item 6. Protection of Environment--calls for new City Master Plan and rezoning.

Item 10. Promoting International Trade--Chamber of Commerce to put more emphasis on "forwarding agent" industry.

Tourism and Recreation Development

Consultant firm prepared a "Tourism and Promotion Study" of the Laredo area under the auspices of the TIC (43:3). The objective of the study was to analyze the ". . . area's tourism and convention facilities . . . and their potential and provide better utilization of present facilities including those at Laredo Air Force Base [43:34]."

Tourism/Recreation development plan entailed detailing the use of Air Force Base Property for Recreational Purposes, as well as overall improvement of community-wide recreation facilities in an effort to attract industry.

Resolving Transportation and Traffic Problems

Development Plans were established for

- a. building a new International Bridge and completing I-35.
- b. relocating airport.
- c. improving access to the redeveloped base property.
- d. (perhaps) build a new truck bridge across the Rio Grande River.
- e. planning and constructing highway and street improvements in and around the city (43:43).

Human Resources Development

Development Plan was established to improve the education and skills of the work force. Focus was on two key areas:

1. Ways to assist persons who lost jobs due to the base closure.
2. Ways to upgrade the city's entire labor force and thus make it more productive and also a source of greater family income.

Specifically relating to re-use of base facilities for training:

1. Laredo Board of Education outlined the need for a central warehouse and motor pool building.
2. Webb County indicated a need for a nursery building for use in a child development program.
3. Laredo Junior College indicated a desire to acquire the dental clinic for use in a proposed program for dental hygienist training.
4. The Laredo Independent School District planned to acquire "some 304 classrooms, a gymnasium, a mess hall for lunchroom facilities, a practice football field, tennis courts, etc. [43:52]" and operate these facilities as part of a high school located within four blocks from the base .

Note: Educational uses permit the retention of related personal property, free.

Public Facilities and Services

The 1964 Area Development Plan for Laredo and Webb County

considered the possibility of the base closing and integrating many of the structures on base into the community for civic purposes.

QUESTION 5

The City of Laredo acquired the base, except for a 284-acre housing and recreation area, from GSA in April 1975, at no cost, under a public airport conveyance. . . A bid has been accepted by GSA for the purchase of the remaining 475 housing units and recreation area [53:12].

End use of the property by re-use class is as follows (26:50):

- a. Industry
- b. Commercial

- c. Aviation
- d. Education
- e. Health
- f. Housing
- g. Recreation
- h. Municipal (city offices).

SELECTED BIBLIOGRAPHY

A. REFERENCES CITED

1. Anderson, M. L., and others. The Economic Impact Forecast System: Description and User Instructions. Unpublished research report No. CERL-TR-N-2, Army Construction Engineering Research Laboratory, Champaign, Illinois, June, 1976.
2. Bureau of National Affairs, Inc. "The National Environmental Policy Act of 1969," Environment Reporter, pp. 23-25.
3. Callander, Bruce. "Bases to Shut--Cutback Hits Thousands," Air Force Times, 12 November 1969, pp. 1, 4.
4. Cerchione, A. J., R. K. Jain, and L. V. Urban. Handbook for Environmental Impact Analysis. Technical report N-1, Army Construction Engineering Research Laboratory, Champaign, Illinois, June, 1976.
5. Daicoff, Darwin W., and others. "Economic Impact of Military Base Closings, Volume I." Unpublished research report number ACDA/E-90. The University of Kansas, Lawrence, Kansas, April 1970.
6. Gates, Edward. "Cutback Hits Many Bases," Air Force Times, 24 March 1971, pp. 1, 18.
7. Hagen, Major Vernon D., USAF. "An Analysis of Military Base Closure Actions," Unpublished thesis, unnumbered, Air Command and Staff College. Maxwell AFB AL, 1969.
8. Hill, Gladwin. "Midpoint of 'Environmental Decade': Impact of National Policy Act Assessed," Management Review. May 1975, pp. 53-55.
9. Jain, R. K., R. D. Webster, and R. L. Welsh. Development of the Environmental Technical Information System. Unpublished research report No. CERL-IR-E-52, Army Construction Engineering Research Laboratory, Champaign, Illinois, April 1975.

10. Kennedy, President John F. State of the Union Message to the Congress of the United States. Washington, D.C., 30 January 1961. As printed in "Local Economic Recovery from Military Base Closures" by John E. Lynch.
11. Lynch, Dr. John E. Director, Program Operations, Office of Economic Adjustment, U.S. Department of Defense, Washington, D.C. Personal interview. 10 January 1977.
12. _____ . "Local Economic Recovery from Military Base Closures." Unpublished research study, AD 859833, Washington, D.C., Department of the Air Force, 1969.
13. McDowell vs the United States Air Force. Findings and Opinion. Case No. 75-CV-234-W-4, June 1975.
14. _____ . Judgement. Case No. 75-CV-234-W-4, June 1975.
15. McGarvey, Major General Billie J. "Air Force Environmental Planning," Supplement to the Air Force Policy Letter for Commanders. AFRP 190-2. Washington: Government Printing Office, May 1975.
16. O'Connor, Helene. Program Manager, Office of Economic Adjustment, U.S. Department of Defense, Washington, D.C. Telephone interview. 26 April 1977.
17. Pearring, Lieutenant Colonel Jerome R., USAF. Program Manager, Office of Economic Adjustment, U.S. Department of Defense, Washington, D.C. Personal interview. 10 January 1977.
18. President's Economic Adjustment Committee. The Impact of Defense Cutbacks on American Communities. Report on Communities Affected by the Defense Facility and Activity Realignments Announced on April 17, 1973. Washington: Government Printing Office, July 1973.
19. U.S. Bureau of the Census. County Business Patterns, 1975. Washington: Government Printing Office, 1976.
20. _____ . Statistical Abstract of the United States. Washington: Government Printing Office, 1973.

21. U.S. Department of the Air Force. Air Installation Compatible Use Zone Study: Proposed Realignment of the Air Force Communication Service. Background Study Number 14-B, Scott Air Force Base, Illinois, December 1975.

22. _____. Environmental Protection: Environmental Assessments and Statements. AFR 19-2. Washington: Government Printing Office, 20 January 1972.

23. U.S. Department of Defense. Defense Impact on Kodiak Island, Alaska: Office of Economic Adjustment. Washington: Government Printing Office, May 1976.

24. _____. Economic Adjustment Program, Aguadilla, Puerto Rico: Office of Economic Adjustment. Washington: Government Printing Office, January 1976.

25. _____. Economic Development Program, Lewistown, Montana: Office of Economic Adjustment. Washington: Government Printing Office. October 1972.

26. _____. Economic Recovery: Community Response to Defense Decisions to Close Bases. Washington: Government Printing Office, 1976.

27. _____. Federal Agency Programs Utilized for Economic Adjustment Assistance: Economic Adjustment Committee. Washington: Government Printing Office, 1973.

28. _____. News Release No. 927-69. "Department of Defense Announces 307 Actions Affecting Installations and Activities." Washington: Office of Assistant Secretary of Defense (Public Affairs), October 29, 1969.

29. _____. News Release No. 178-70. "Department of Defense Announces 371 Actions Affecting Installations and Activities." Washington: Office of Assistant Secretary of Defense (Public Affairs), March 6, 1970.

30. _____. News Release No. 307-69. "Secretary of Defense Announces Actions Affecting 40 Installations and Activities." Washington: Office of Assistant Secretary of Defense (Public Affairs), April 24, 1969.

31. _____. News Release No. 180-73. "Secretary of Defense Elliot L. Richardson Announces 274 Actions Affecting

Military Installations." Washington: Office of Assistant Secretary of Defense (Public Affairs), April 17, 1973.

32. U.S. Department of Defense. News Release No. 550-74. "Secretary of Defense James R. Schlesinger Announces 111 Actions Affecting Military Installations." Washington: Office of Assistant Secretary of Defense (Public Affairs), November 22, 1974.

33. Industrial Development Profile for Newberg, New York: Office of Economic Adjustment. Washington: Government Printing Office, July 1970.

34. Industrial Development Profile for Vieques and Aguadilla, Puerto Rico: Office of Economic Adjustment. Washington: Government Printing Office, October 1972.

35. Office of Economic Adjustment. Memorandum for Economic Adjustment Committee, subject: The Status of Economic Adjustment Program, Hamilton Air Force Base, Washington, June 25, 1976.

36. Office of Economic Adjustment. Memorandum, subject: Summary of Completed Major Economic Adjustment Projects, 1961-1973, Pentagon, Washington, D.C., 1973.

37. Office of Economic Adjustment Report for Period August-October 1970. Washington: Government Printing Office, November 1970.

38. Office of Economic Adjustment Program Status Report as of February 26, 1971. Washington: Government Printing Office. March 1971.

39. Office of Economic Adjustment Program Status Report as of July 30, 1971. Washington: Government Printing Office. August 1971.

40. Office of Economic Adjustment Program Status Report as of December 31, 1971. Washington: Government Printing Office. January 1972.

41. Office of Economic Adjustment Program Status Report as of September 30, 1972. Washington: Government Printing Office. October 1972.

42. U.S. Department of Defense. Report of Economic Adjustment Program, Chicopee/Ludlow, Massachusetts: Office of Economic Adjustment. Washington: Government Printing Office, August 1974.

43. . Report of Economic Adjustment Program, Laredo, Texas: Office of Economic Adjustment. Washington: Government Printing Office, July 1974.

44. . Report of Economic Adjustment Program, Orlando, Florida: Office of Economic Adjustment. Washington: Government Printing Office, December 1973.

45. . Report on Community Adjustment Program, Sherman Denison, Texas: Office of Economic Adjustment. Washington: Government Printing Office, January 31, 1972.

46. . Report on the Community Economic Adjustment Program in Ventura County, California: Office of Economic Adjustment. Washington: Government Printing Office, July 1972.

47. . Report of Community Visits, Topeka, Kansas: Office of Economic Adjustment. Washington: Government Printing Office, March 1974.

48. . Report of Community Visit, Puerto Rico: Office of Economic Adjustment. Washington: Government Printing Office, October 15, 1970.

49. . Report of Community Visit to Sherman-Denison, Grayson County, Texas: Office of Economic Adjustment. Washington: Government Printing Office, March, 1972.

50. . Second Annual Report to the President on Federal Assistance to Defense-Impacted Communities: The Inter-Agency Economic Adjustment Committee. Washington: Government Printing Office, April 29, 1972.

51. . Status of Community Programs: Economic Adjustment Committee, January 31, 1973. Washington: Government Printing Office, February 1973.

52. . Status of Community Programs: Economic Adjustment Committee, April 30, 1974. Washington: Government Printing Office, May 1974.

B. RELATED SOURCES

Barr, Captain Thomas F., USAF, and Captain Anthony C. Nardeccchia, Jr., USAF. "The Economic Impact of a Military Installation Closure on a Nearby Community: A Case Study of Available Data." Unpublished master's thesis. SLSR 8-26A, AFIT/SL, Wright-Patterson AFB OH 1976.

"Big Shifts in U.S. Defense," U.S. News & World Report, February 2, 1970, pp. 30-33.

Buckley, Nora C. "An Overview of Studies of the Impact of Military Installations and Their Closings on Nearby Communities." Unpublished research report No. T-338, The George Washington University, Washington, D.C. July 20, 1976.

Commonwealth of Massachusetts. Report from the Joint Commission
on Federal Base Conversion, Recommendations and Summary of
Activities May, 1973 to May, 1974.

Henriksen, Lester H. "Land Use and the Environment: Public Policy Issues," Environment Reporter. Monograph No. 20, November 8, 1974.

"How One City Beat a Cutback," U.S. News and World Report, October 5, 1970, pp. 43-44.

"Impact of Deep Cuts in Defense," U.S. News and World Report,
February 16, 1970, pp. 31-33.

Jain, R. K., and others. Environmental Impact Assessment Study for Army Military Programs. Army Construction Engineering

Research Laboratory, Champaign, Illinois, December 1973.

Meis, Joe F. "Facility Engineering in the 1970's--A Challenge," Supplement to the Air Force Policy Letters for Commanders. AFRP 190-2. Washington: Government Printing Office, August 1976.

National Council for Urban Economic Development. Community Economic Adjustment, Report of a Seminar Held April 25-26, 1974. Washington, D.C., April 1974.

Parsons, Captain Robert J., USAF. "The Economic Impact of a Military Installation Closure on the Surrounding Community: Clinton County Air Force Base." Unpublished master's thesis. SLSR 5-76B/AFIT/SL, Wright-Patterson AFB OH, 1976.

Russett, Bruce M. "Who Pays for Defense?" The American Political Science Review, June 1969, pp. 412-426.

Sheehan, William J. Director, Office of Economic Adjustment, U.S. Department of Defense. Letter to Mr. D. J. Cahill, Acting Assistant Secretary, Economic Development Administration, U.S. Department of Commerce, February 28, 1975.

Sweeney, Lieutenant Colonel Patrick J., USAF. Environmental Planning in DOD. Wright-Patterson AFB, Ohio, 1975.

Thompson, Major General Robert C., USAF. "Environmental Planning and the Decision Process," The Military Engineer, January-February 1976, pp. 11-13.

U.S. Bureau of the Census. County Business Patterns, 1969, Alabama, CBP-69-2. Washington: Government Printing Office, 1970.

_____. County Business Patterns, 1970, Alabama, CBP-70-2. Washington: Government Printing Office, 1971.

_____. County Business Patterns, 1971, Alaska, CBP-71-3. Washington: Government Printing Office, 1972.

_____. County Business Patterns, 1974, Alaska, CBP-74-3. Washington: Government Printing Office, 1975.

_____. County Business Patterns, 1969, California, CBP-69-6. Washington: Government Printing Office, 1970.

U.S. Bureau of the Census. County Business Patterns, 1974, California, CBP-74-6. Washington: Government Printing Office, 1975.

_____. County Business Patterns, 1973, Florida, CBP-73-11. Washington: Government Printing Office, 1974.

_____. County Business Patterns, 1969, Indiana, CBP-69-16. Washington: Government Printing Office, 1970.

_____. County Business Patterns, 1973, Kansas, CBP-73-18. Washington: Government Printing Office, 1974.

_____. County Business Patterns, 1973, Massachusetts, CBP-73-23. Washington: Government Printing Office, 1974.

_____. County Business Patterns, 1969, Minnesota, CBP-69-25. Washington: Government Printing Office, 1970.

_____. County Business Patterns, 1971, Minnesota, CBP-71-25. Washington: Government Printing Office, 1972.

_____. County Business Patterns, 1971, Montana, CBP-71-28. Washington: Government Printing Office, 1972.

_____. County Business Patterns, 1969, New York, CBP-69-34. Washington: Government Printing Office, 1970.

_____. County Business Patterns, 1969, Ohio, CBP-69-37. Washington: Government Printing Office, 1970.

_____. County Business Patterns, 1971, Ohio, CBP-71-37. Washington: Government Printing Office, 1972.

_____. County Business Patterns, 1969, Oklahoma, CBP-69-38. Washington: Government Printing Office, 1970.

_____. County Business Patterns, 1969, Oregon, CBP-69-39. Washington: Government Printing Office, 1970.

_____. County Business Patterns, 1970, Oregon, CBP-70-39. Washington: Government Printing Office, 1971.

_____. County Business Patterns, 1974, Pennsylvania, CBP-74-40. Washington: Government Printing Office, 1975.

U.S. Bureau of the Census. County Business Patterns, 1973, Puerto Rico, CBP-73-53. Washington: Government Printing Office, 1974.

. County Business Patterns, 1969, Tennessee, CBP-69-44. Washington: Government Printing Office, 1970.

. County Business Patterns, 1969, Texas, CBP-69-45. Washington: Government Printing Office, 1970.

. County Business Patterns, 1971, Texas, CBP-71-45. Washington: Government Printing Office, 1972.

. County Business Patterns, 1973, Texas, CBP-73-45. Washington: Government Printing Office, 1974.

. County Business Patterns, 1974, Washington, CBP-74-49. Washington: Government Printing Office, 1975.

. County Business Patterns, 1969, Wisconsin, CBP-69-51. Washington: Government Printing Office, 1970.

. County Business Patterns, 1974, Wisconsin, CBP-74-51. Washington: Government Printing Office, 1975.

U.S. Department of Defense. Economic Adjustment Committee Team Visit to Duluth, Minnesota and Superior, Wisconsin: Office of Economic Adjustment. Washington: Government Printing Office, March, 1973.

. New England Region, Office of Economic Adjustment. Memorandum for Joe Magiern, subject: Westover Status Report, Boston, Massachusetts, April 11, 1975.

. Office of Economic Adjustment. Memorandum for the Record, subject: EDA Public Works Grants, Washington, February 14, 1975.

. Report of Community Visit to Duluth, Minnesota and Superior, Wisconsin: Office of Economic Adjustment. Washington: Government Printing Office.

. Report of Community Visit to Matagorda Island and Calhoun County, Texas: Office of Economic Adjustment. Washington: Government Printing Office, December 1975.

U.S. Department of Defense. Report of Community Visit, Wadena, Minnesota: Office of Economic Adjustment. Washington: Government Printing Office, December 1971.

_____. Status Report on Economic Adjustment Programs in Aguadilla and Vieques, Puerto Rico: Office of Economic Adjustment. Washington: Government Printing Office, April 1972.

Vest, Gary D. "Contemporary Forum of Cooperative Planning," Engineering and Services Quarterly, August 1976, pp. 9-12.

"Where Defense Cuts Hurt Most," U. S. News & World Report, October 5, 1970, pp. 40-42.

Yarrington, Hugh J. "The National Environmental Policy Act," Environment Reporter. Monograph No. 17, January 4, 1974.